

**OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT'S  
LONG-TERM BASELINE FUNDING NEEDS AS REQUIRED BY  
FY 2003/04 BUDGET ACT SUPPLEMENTAL LANGUAGE  
ITEM 3980-001-0001**

Prepared by:

Office of Environmental Health Hazard Assessment

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Arnold Schwarzenegger  
Governor

Alan C. Lloyd, Ph.D.  
Secretary for Environmental Protection  
California Environmental Protection Agency

Joan E. Denton, Ph.D.  
Director  
Office of Environmental Health Hazard Assessment

## PREFACE

This report has been prepared by the Office of Environmental Health Hazard Assessment (OEHHA) in compliance with the provisions contained in the Supplemental Report of the 2003 Budget Act, Item 3980-001-0001. These provisions state:

*“On or before January 10, 2004, the Office of Environmental Health Hazard Assessment (OEHHA) shall provide a report to the Legislature (including budget and fiscal committees from both houses) on the long-term baseline funding requirements of the office. It is the intent of the Legislature that OEHHA be funded at a level that allows the office to adequately meet its statutory mandates and to do so as efficiently as possible. The purpose of this report shall be to determine the appropriate level of funding for the office and allocation of funding sources to support this level of funding. In particular, the report shall include the following:*

- (a) Analysis of ongoing funding requirements of the department to allow it to carry out its responsibilities under state law.*
- (b) Recommendations regarding the appropriate mix of general funds and special funds, including all eligible special fund sources (whether or not fund balances are available to support these activities), to support the office’s activities.*
- (c) Recommendations for the level of General Fund and fee support to support these activities, tying the funding source to specific mandated activities, and a justification for why these levels were selected.*
- (d) Findings regarding potential improvements in the efficiency of the department’s operations, including mechanisms to share workload with other Cal/EPA agencies and the Department of Health Services.”*

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## EXECUTIVE SUMMARY

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OEHHA is the lead state entity for the assessment of health risks posed by chemical contaminants in the environment. Much of the scientific expertise in state government for assessing such risks is concentrated in OEHHA. When the California Environmental Protection Agency (Cal/EPA) was established in 1991, OEHHA was deliberately created as a separate and distinct entity from the other five Cal/EPA boards and departments to provide adequate separation between the scientific work of “risk assessment” and the regulatory (“risk management”) activities of the other boards and departments, which must balance other considerations. (See Appendix A for more information.)

The Cal/EPA boards and departments, the Department of Health Services (DHS) and other agencies use OEHHA’s scientific assessments in developing policies and regulatory strategies to protect the health of Californians. These assessments help ensure that state regulations and policies focus on the most significant health threats, which in turn helps ensure that precious resources devoted to public health protection are expended in the most effective manner.

OEHHA’s assessments form the scientific basis for California’s drinking water standards, ambient air quality standards, the identification of toxic air contaminants, and the placement of substances on the state’s Proposition 65 list of chemicals known to cause cancer, birth defects and other reproductive harm. OEHHA also plays a key role in the registration and regulation of pesticides, provides guidance to other agencies in the assessment of urban “brownfields” and other contaminated sites, issues advisories concerning harmful contaminants in sport fish, and is engaged in several activities to better assess risks to children’s health from environmental contaminants.

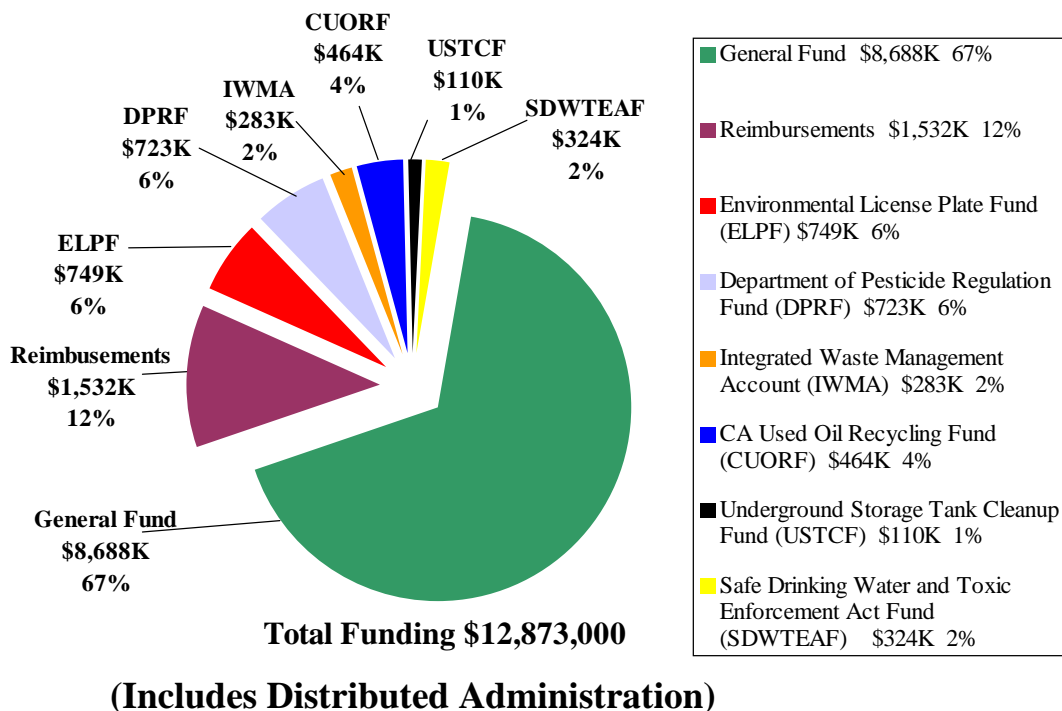
There have been dramatic shifts in OEHHA’s budget and funding sources since the office’s formation. From an initial FY 91/92 budget of \$7.9 million (102.1 PY), OEHHA’s budget “peaked” in FY 01/02 at \$18 million (174.9 PY). This growth reflected the addition of a number of mandates during that 10-year period. Without any reduction in mandates, OEHHA’s FY 03/04 budget has shrunk by 28 percent to \$12.9 million (114.9 PYs) (see Figure 1). OEHHA in the past two years has eliminated virtually all its contract support, eliminated all vacant positions, and reduced more than 20 percent of its filled positions through employee attrition pursuant to budget act reductions. In aggregate, these reductions diminish all programs that OEHHA administers and threaten the sustainability of its core risk assessment functions.

Conflicted fiscal policy has contributed to OEHHA’s fiscal instability. The General Fund was the source of 50 percent of OEHHA’s FY 91/92 budget in recognition of the broad “nexus” of the programs. As General Fund pressures increased in the 1990’s, that fund source was reduced. By FY 95/96, 58 percent of OEHHA’s revenues came from reimbursements from other government agencies. The Legislative Analyst’s Office (LAO) warned in its 1997-98 budget analysis that OEHHA’s dependence on reimbursements could potentially compromise its scientific independence. In response, the Legislature appropriated the General Fund, rather than reimbursements. In FY 01/02, General Fund represented about 80 percent of OEHHA’s support. About 67 percent of OEHHA’s current year support is from the General Fund (see Figure 1).

As the General Fund is the single largest appropriation supporting OEHHA, the “risk assessment” functions remain vulnerable to external economic circumstances although “risk management” functions in regulatory entities are somewhat insulated. Other boards and

departments within Cal/EPA are supported chiefly by special funds. Future General Fund shortfalls could delay “risk management” programs if adequate “risk assessment” support from OEHHA is reduced.

**Figure 1**  
**Office of Environmental Health Hazard Assessment**  
**FY 03-04 Baseline Budget**



**Conclusions:**

- OEHHA plays an essential role in protecting public health and the environment in California. OEHHA’s independent scientific assessments form the foundation of many of the state’s environmental standards and regulations.
- The collective expertise of OEHHA’s staff scientists is an important public asset that, like any other public asset, should be protected and managed wisely. OEHHA’s current staffing to support the department and its mandates is at critical mass, and cannot absorb further reductions. Severe staff attrition prompted by budget cuts in recent years has created critical gaps in the staff’s expertise that cannot be easily replaced.
- As General Fund support has been reduced every year since FY 02/03 OEHHA cannot fulfill all mandates in a timely or efficient manner.

## **Recommendation**

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To ensure program stability, the Legislature may consider diversifying the appropriations that support OEHHA. Several special funds have a “nexus” with the OEHHA-administered risk assessment functions. However, utilizing some of these special funds without increasing the fees which support those funds may negatively impact other Cal/EPA BDOs and other state departments’ risk management activities.

## Findings

The estimated total cost for the existing statutory mandates is:

<b>TOTAL RESOURCES TO MEET OEHHA MANDATES</b>				
	<b>TOTAL*</b>		<b>03-04 RESOURCES</b>	
	<b>\$'s (in k's)</b>	<b>Positions</b>	<b>\$'s (in k's)</b>	<b>Positions</b>
<b>PROGRAM ACTIVITIES</b>				
Toxic Air Contaminants	\$2,059	11.0	\$1,508	9.0
Fuels	\$2,248	16.0	\$1,416	9.0
Criteria Air	\$1,446	7.5	\$690	3.5
Hot Spots	\$1,046	7.0	\$757	5.0
Indoor Air	\$390	3.5	\$284	2.5
Pesticide Use & Safety	\$1,982	14.5	\$1,259	6.5
Site Assessment	\$424	2.0	\$424	2.0
Border	\$137	1.0	\$137	1.0
Children's Cancer Guidelines	\$1,077	5.0	\$180	1.0
Fish	\$1,426	8.1	\$1,029	7.1
Drinking Water	\$1,782	12.0	\$1,397	10.0
SB 32 (Land Restoration & Reuse)	\$215	2.0	\$0	0.0
Haz. ID/Technical Support/Proposition 65	\$3,437	24.0	\$2,230	16.5
Science Advisory Board	\$22	0.0	\$22	0.0
Proposition 65 Implementation	\$245	2.0	\$245	2.0
School Sites	\$988	3.8	\$515	2.8
School Art Products	\$378	3.0	\$0	0.0
EPIC	\$1,023	3.0	\$0	0.0
Program Support (Clerical, Supervisors, Cost Distributed)	\$0	6.0	\$0	6.0
<b>TOTAL PROGRAMS</b>	<b>\$20,325</b>	<b>131.4</b>	<b>\$12,093</b>	<b>83.9</b>
<b>TOTAL EXEC.</b>	<b>( \$ 1,133)</b>	<b>10.0</b>	<b>( \$ 1,133)</b>	<b>10.0</b>
<b>TOTAL EXT. AFFAIRS/LEGISLATION</b>	<b>( \$ 36)</b>	<b>0.0</b>	<b>( \$ 36)</b>	<b>0.0</b>
<b>TOTAL ADMIN.</b>	<b>( \$ 1,540)</b>	<b>16.0</b>	<b>( \$ 1,540)</b>	<b>16.0</b>
<b>TOTAL OEHHA</b>	<b>\$20,325</b>	<b>157.4</b>	<b>\$12,093</b>	<b>109.9</b>

(Summarized from Appendix C)

**Note: The total resources of \$20.3 million and 157.4 positions do not include a full complement of Distributed Administration or Program Administration. Therefore, to the extent resources are added to OEHHA's budget, there would also need to be a complementary level of administrative resources added as well.**

## Options

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Without regard to the total level of funding needed to meet existing mandates, four options may be considered to diversify support for OEHHA functions:

- 1) Direct funding from special funds that support Cal/EPA boards and departments based on their respective budgets. This option proposes that OEHHA receive 100 percent of its funding (at whatever level the Legislature determines in the annual budget act) via direct appropriations from special funds that also support the other Cal/EPA BDOs. The percentage of OEHHA support from each BDO would reflect that BDO's percentage of the total Cal/EPA budget. For example, the budgets of the State Water Resources Control Board (SWRCB) and nine regional water quality control boards comprise approximately 59 percent of Cal/EPA's total budget and, therefore, SWRCB-related fund(s) would fund 59 percent of OEHHA's budget.
- 2) Direct funding from special funds that support Cal/EPA boards and departments based on OEHHA's expenditures in program/media (i.e., air, water, land and other) areas. This option also proposes that OEHHA support would reflect the percentage of OEHHA's expenditures relating to the media (air, water, land) that falls within a regulatory jurisdiction. For example, the percentage of OEHHA revenues received from funds that support the Air Resources Board (ARB) would reflect the percentage of OEHHA revenues relating to air contaminants.
- 3) Mix of special fund appropriations from special funds that support Cal/EPA BDOs and other state departments. This option is essentially a refinement of Option 2, with OEHHA's existing special funds augmented in accordance with OEHHA's program costs by media (air, water, land).
- 4) Retain current special fund sources, and add additional special fund sources while continuing to receive some General Fund. This option proposes that OEHHA keep its current special fund sources, and replace a large portion of General Fund with additional special fund appropriations. This option is similar to Option 3, except that OEHHA would continue to receive some General Fund support for programs that do not have a "nexus" to special fund(s).

However, it should be noted that utilizing most of the special funds without increasing the associated fees would negatively impact the other Cal/EPA boards and departments through potential program reductions.



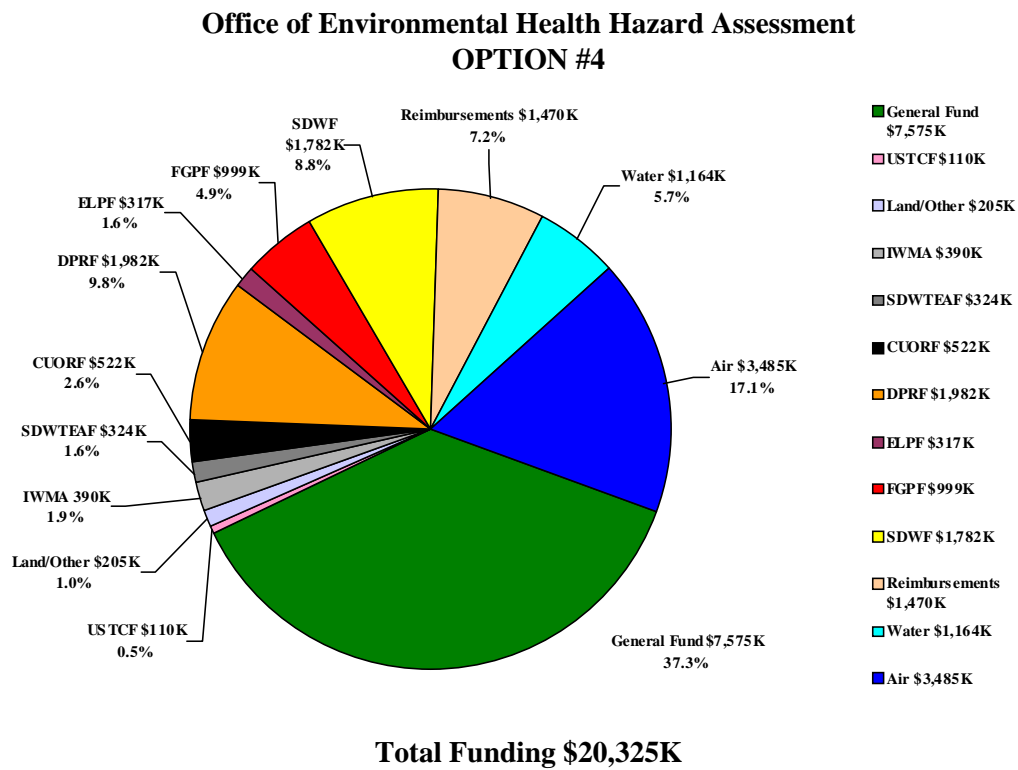
OEHHA's preferred option is Option 4 because it would diversify funding sources while maintaining core risk assessment functions. Under this option, OEHHA would directly receive special funds for specific activities relating to the objectives of those funds, and General Fund for general activities that may not be directly tied to a special fund. Below is a chart showing the recommended funding options.

**RECOMMENDED FUNDING SOURCE OPTION MIX  
TO SUPPORT OEHHA ACTIVITIES**

<b><u>PROGRAM ACTIVITIES</u></b>	<b><u>FUND NAME AND CODE*</u></b>
Toxic Air Contaminants	APCF (0115); GF (0001); MVA (0044)
Fuels	APCF (0115); USTCF (0439); UORF (0100); MVA (0044)
Criteria Air	APCF (0115); MVA (0044); GF (0001)
Hot Spots	Reimbursement; ATIAA (0434)
Indoor Air	APCF (0115); IWMA (0387)
Pesticide Use & Safety	DPRF (0106)
Site Assessment	Reimbursement; USTCF (0439); SWQCF (0679)
Border	APCF (0115); WDPF (0193); GF (0001)
Children's Health	APCF (0115); MVA (0044); GF (0001)
Fish	ELPF (0140); USTCF (0439); FGPF (0200); WDPF (0193)
Drinking Water	SDWA (0306)
SB 32 (Land Restoration & Reuse)	USTCF (0439)
Haz. ID/Technical Support	WDPF (0193); SDWTEAF (3056); GF (0001)
Science Advisory Board	WDPF (0193); GF (0001)
Prop. 65 Implementation	WDPF (0193); GF (0001)
School Sites	TSCA (0557); USTCF (0439); GF (0001)
School Art Products	APCF (0115); GF (0001)
EPIC	APCF (0115); ELPF (0140); UORF (0100); IWMA (0387); GF (0001) USTCF (0439); MVA (0044); WDPF (0193); TSCA (0557); HWCA (0014)

\*Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

Under the recommended option, OEHHA's revenue mix would consist of the following to support the \$20.3 million budget identified in the chart on page 7. See diagram below.



## INTRODUCTION

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The Supplemental Report of the 2003 Budget Act, Item 3980-001-0001, requires OEHHA to prepare a report to the Legislature (including budget and fiscal committees from both houses) on or before January 10, 2004, on the long-term baseline funding requirements of the department. The purpose of this report is to provide information so the Legislature can determine appropriate level of funding for the department and allocation of funding sources to support that level of funding. The intent stated by the Legislature in mandating this report was to ensure that OEHHA is funded at a level that allows the department to adequately meet its statutory responsibilities and to do so as efficiently as possible.

In fulfillment of this requirement, OEHHA has prepared this following report, which includes the following:

- (a) Analysis of ongoing funding requirements of the department to allow it to carry out its responsibilities under state law.
- (b) Recommendations regarding the appropriate mix of general and special funds, including all eligible special fund sources (whether or not fund balances are available to support these activities), to support the department's activities.
- (c) Recommendations for the level of General Fund and fee support to support these activities, tying the funding source to specific mandated activities, and a justification for why these levels were selected.
- (d) Findings regarding potential improvements in the efficiency of the department's operations, including mechanisms to share workload with other Cal/EPA boards and departments, and DHS.

The information presented in the report is organized in a manner that reflects the existing structure and program functions in OEHHA. Each program is described in the report, citing the statutory mandates that each of the programs implements. In practice, there is extensive interaction and cooperation among OEHHA's core programs, and it is not unusual for scientists in two or more programs to be involved in the same mandated activity. The statutory mandates have been compiled in a separate appendix to the report. The report contains an itemized listing of resource needs, with suggested options for funding sources and addresses an option for improved efficiency.

OEHHA is a unique department, both in Cal/EPA and as an independent entity in California state government. Its functions are not duplicated in other agencies and it serves an important role in environmental and public health protection for California. OEHHA's funding history is equally unique, and consideration of future mechanisms to stabilize and diversify its funding base will benefit from an understanding of OEHHA's responsibilities and the challenges (particularly in the area of staffing) that OEHHA faces in complying with its mandates.

## BACKGROUND

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OEHHA is a critical organization in the existing public health and environmental regulatory framework in California. OEHHA is the lead state entity for the assessment of health risks posed by chemical contaminants in the environment. OEHHA's assessments form the scientific basis for California's drinking water standards, ambient air quality standards, the identification of toxic air contaminants, and the placement of substances on the state's Proposition 65 list of chemicals known to cause cancer, birth defects and other reproductive harm. OEHHA also plays key roles in the registration and regulation of pesticides, provides guidance to other agencies in the assessment of urban "brownfields" and other contaminated sites, issues advisories concerning harmful contaminants in sport fish, and is engaged in several activities to better assess risks to children's health from environmental contaminants.

OEHHA's scientific analyses are a critical but little-seen component that provides the foundation of regulatory programs and decisions. Legislative debate and news-media coverage often focus on the cost of environmental regulations and their impact on the state's economy. Far less attention is paid to the scientific process of identifying and assessing public health threats. However, the results of those scientific assessments form the basis for policy decisions and regulatory strategies that protect the health of Californians. High-quality independent scientific work helps ensure that regulations and policies focus on the most significant health threats from environmental hazards, which helps ensure in turn that precious resources devoted to public health protection are expended in the most effective manner. Unstable funding for in these scientific activities reduce the state's ability to protect public health and the environment.

In making decisions to protect public health and the environment, one of the primary factors used by government is the risk of adverse health effects from an environmental hazard. In fact, almost all environmental laws use risk as the basis for setting standards and developing mitigation and intervention measures. Risk is also used to set priorities and direct resources. A general understanding of the process OEHHA uses to assess health risks is helpful in understanding OEHHA's role in the public health system and the activities it conducts to implement statutory and program mandates.

### **Risk Assessment**

Risk assessment is a rigorous scientific process that, for the purposes of protecting public health, quantifies the probability of an illness or other health effect occurring in an individual or a population from exposure to hazardous substances. Much of the scientific expertise in state government for conducting health risk assessments is concentrated in OEHHA.

In 1983, the National Academy of Sciences (NAS) established a basic process for health risk assessment as a key tool in making environmental decisions. One key objective of NAS was to separate the "science based" task of evaluating health risks from the "value based" tasks of managing risks through the regulatory process. This separation strengthens the scientific integrity of health risk assessments by protecting them from the economic and political pressures that come into play when making regulatory decisions. The operation of OEHHA as an entity

that is separate and distinct from other state regulatory boards and departments is based on this fundamental principle of separation of “risk assessment” and “risk management.”

Functionally, risk assessment is divided into four steps:

- 1) Hazard identification. Scientists identify substances in the environment that might cause harm to humans who may be exposed to them. In this step, the health effects posed by specific substances are identified. For example, scientists determine whether the substances being evaluated in the risk assessment cause cancer, birth defects, neurological damage or any other specific health effects.
- 2) Dose-response assessment. Toxicologists determine the levels of exposure to the substances identified in Step 1 that would cause particular levels of risks to human health. For most hazardous substances, there is a range of health effects that can be observed depending on the amount of exposure, or the “dose.” This step relies on scientific data collected from laboratory animal experiments and/or studies of human volunteers or workers who had been exposed to the substances in question. These first two steps are the core of risk assessment.
- 3) Exposure assessment. Risk assessors quantify the level of human exposure to the substances identified and evaluated in steps one and two. Ordinarily, exposure data is obtained from air, water and/or soil sampling compiled by environmental agencies. Mathematical models are then used to extrapolate human exposure to the substances from measured levels in the environment.
- 4) Risk characterization. Scientists estimate the human health impacts from exposure to the substances in question. Depending on the substances, this could involve an estimation of the risk of developing cancer from an environmental exposure to the substances. It could also involve an estimate of non-cancer health effects, such as birth defects. In this step, the risk assessor discusses the level of confidence in the analysis and describes areas of uncertainty in the risk calculation and the additional data that would be needed to reduce the uncertainty.

It is common for regulatory (“risk management”) agencies to be involved in certain stages of risk assessment. For example, regulatory agencies such as the ARB and the Department of Toxic Substances Control (DTSC) typically collect environmental monitoring data to be used in the exposure assessment (Step 3). While OEHHA plays a major role in all four stages of a risk assessment, OEHHA’s key activity is conducting steps one and two. OEHHA is specifically set up to perform this highly specialized assessment, which requires rigorous scientific analyses that are outside the scope of the day-to-day activities normally associated with California’s environmental regulatory agencies.

While OEHHA's hazard identifications and dose-response assessments are highly technical and are rarely read outside of scientific circles, they form the scientific foundation of many of California's environmental regulatory and public health standards. For this reason, OEHHA is critical to the state's environmental regulatory system. So that state regulatory programs can achieve their goal of reducing environmental contaminants to levels that are protective of human health, OEHHA must provide thorough, timely scientific assessments.

## **OEHHA's History and Role in Cal/EPA**

OEHHA provides scientific expertise and public health oversight to the other departments and boards in Cal/EPA, as well as other state and local government agencies. Overall, OEHHA's primary mission is "to protect and enhance public health and the environment by scientific evaluation of risks posed by hazardous substances." The smallest of the six Cal/EPA entities, OEHHA is the only organization in Cal/EPA that has no enforcement authority, and its regulatory powers are limited.

OEHHA was formed in 1991 as part of a larger reorganization of the state's environmental programs that established Cal/EPA. However, its roots extend back several decades to the early years of California's environmental-protection efforts. For example, OEHHA's air toxicology programs trace their origins to the formation of an air epidemiology unit in the Department of Public Health in the 1950s. OEHHA's pesticide programs are the descendants of initiatives that began following the publication of Rachel Carson's "The Silent Spring" in the 1960s, and the controversy over urban aerial spraying to eliminate a Medfly infestation in the 1980s. Hazardous waste assessment activities in OEHHA owe their existence to a decision by Governor Jerry Brown in the early 1980s to form an environmental toxics unit in DHS in response to growing concern at the time over hazardous waste contamination. And the approval of Proposition 65 by California voters in 1986 created a need for toxicologists in state government to administer the list of chemicals known to the state to cause cancer, birth defects and other reproductive harm – a task initially assigned to the Health and Welfare Agency and then transferred to OEHHA upon its establishment.

To improve the coordination of California's environmental programs, the Governor's Reorganization Plan No. 1 of 1991 (GRP-1), effective July 17, 1991, formed OEHHA as the independent "scientific arm" of Cal/EPA with these four core toxicology programs – air, pesticides, hazardous waste and Proposition 65 – that had previously been housed in DHS. A summary of the reorganization plan is contained in Appendix A.

According to the GRP-1 Summary, OEHHA was created to "provide information to environmental regulators and the public about the adverse health effects that result from environmental exposures to noninfectious agents. The proposed organizational placement of the Office, to become a freestanding entity parallel to the risk management programs, represents a significant elevation from its current division status. The proposed structure of this Office will provide functional and organizational separation of risk assessment from risk management, while providing the Agency with the tools needed to achieve its mission of environmental protection" (see Appendix A).

GRP-1 transferred four core programs and associated staffing from DHS to OEHHA, and established OEHHA as the lead agency in implementing Proposition 65.

GRP-1 established OEHHA's general functions as follows:

- Evaluate the health risks of chemicals in the environment. To this end, OEHHA provides information to environmental regulators and the public about the health effects that result from environmental exposures to noninfectious agents. Emphasis is placed on the synergistic and cumulative effects of total exposure from all pollution sources.
- Identify, quantify, and recommend health-based standards for chemicals in the environment. Specific OEHHA activities focus on chemicals in air, water, food, solid and hazardous waste, fish, sediment, and certain consumer products, as well as chemicals subject to Proposition 65.
- Provide technical and scientific support, consultation, and training to state regulators, local government agencies, and the public.
- Develop scientific policies and guidelines for risk assessment procedures.
- Provide oversight of regulatory activities and guidance on scientific aspects of environmental protection.

To maintain the integrity of the risk assessment process in California, the GRP-1 Summary also says, "The functional and conceptual separation of risk assessment and risk management will be bolstered by the establishment of the OEHHA as a free-standing office, separated organizationally from the other regulatory units. At the same time, the risk assessment function will be housed within Cal-EPA, thereby enabling the Agency to set timing and resource priorities as necessary to achieve its environmental protection mission."

A fifth core program – drinking water – joined the air, pesticides, hazardous waste and Proposition 65 programs at OEHHA in 1996, with the enactment of legislation requiring OEHHA to perform health risk assessments of drinking water contaminants that form the scientific basis for the state's drinking water standards.

In addition to these five core programs, OEHHA has key responsibilities in two "cross-media" programs that may involve the evaluation of contaminants that move back and forth between (or are simultaneously present in) air, water and land. In evaluating its baseline funding needs, OEHHA considers these cross-media functions, along with the core programs, as its primary responsibilities necessary to support Cal/EPA and its boards and departments.

These two cross-media programs are:

Children's Health. In 1999, the Legislature enacted Senate Bill 25 (Escutia, Chapter 731, Statutes of 1999, Health and Safety Code Section 39669.5 et seq.), also known as the Children's Environmental Health Protection Act, which directs OEHHA and ARB to evaluate the state's ambient air quality standards and air toxics regulations to determine whether they adequately protect children and infants. This important work is now underway and will lead to the revision of any air quality standards and toxics measures deemed inadequate to protect children. The state's air-quality standards for particulate matter were revised in 2002 as a result of this

measure. Similarly, as part of a Cal/EPA initiative that was codified by Assembly Bill 2872 (Shelley, Chapter 144, Statutes of 2000), OEHHA compiled a list of chemicals of concern to children's health at existing and proposed school sites, and is developing new risk assessment guidelines to be used for the evaluation of school sites. OEHHA is also developing new guidelines for the assessment of children's cancer risks, as mandated by the bill.

Environmental Indicators. OEHHA is the lead agency in Cal/EPA's Environmental Protection Indicators for California (EPIC) project, a collaborative effort of Cal/EPA, the Resources Agency and DHS. In 2000, Cal/EPA designated OEHHA as the lead entity for this effort to identify new kinds of measurements of environmental conditions, or "indicators," that will better enable scientists and regulators to determine the true health of California's environment and assess the effectiveness of the state's environmental programs. Cal/EPA will also use data provided by the indicators in making policy and budgetary decisions. The first set of 84 indicators was completed in 2002 and is available at OEHHA's Web site. In 2003, the Legislature enacted Assembly Bill 1360 (Steinberg, Chapter 664, Statutes of 2003), which requires OEHHA to continue to develop and maintain the indicators system to the extent funding is appropriated by the Legislature. No funding was appropriated for EPIC activities for the current fiscal year.



## **Profile of OEHHA's Staff**

By far, the largest proportion of departmental resources is allocated to the scientific staff of OEHHA. (In fact, Health and Safety Code Section 359002 stipulates that the director of OEHHA “shall have broad-based scientific expertise as evidenced by a doctoral degree and work experience in a biological or medical science.”) Many OEHHA scientists are educated and trained in the medical sciences, including toxicology, medicine, epidemiology, biostatistics, chemistry, biology, and other closely related fields. OEHHA also employs staff who are educated in the environmental sciences. Some examples of OEHHA scientists' areas of specialty are public and occupational health, food chemistry, reproductive and developmental toxicology, cancer research, pesticide toxicology, environmental toxicology, modeling and other statistical applications, pediatrics, and clinical and community-based research.

While the concentration and level of available scientific expertise is clearly advantageous in meeting the responsibilities of the department, this also creates challenges. OEHHA often only has one expert in a particular area of public health science. Staff reductions in the past two years have resulted in losses in critical scientific expertise in areas such as epidemiology, childhood asthma, and childhood cancer. This requires training of other staff, which may take several years. This creates departmental inefficiencies that can slow the completion of mandated activities. OEHHA's staffing is presently at “critical mass,” making it even more difficult to train existing employees, which further hampers the completion of mandated activities. Another challenge is the time needed to recruit and hire new staff is much greater for highly specialized scientists than for more general civil-service classifications. OEHHA must compete with other employers for a relatively small pool of candidates. Once hired, the level of training for new staff in the sciences is complicated and intensive, requiring months or even years in some cases for scientific staff to develop the level of independence necessary to assume a lead role in completing projects.

## FUNDING HISTORY

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OEHHA's overall budget increased from \$7.9 million (102.1 PY) in its initial year of operations in FY 91/92 to \$13 million in FY 95/96. The budget later "peaked" in FY 01/02 at \$18 million (174.9 PYs) and, following two consecutive years of major budget cuts, is currently at \$12.9 million (114.9 PYs) in FY 03/04. The charts on the following page trace the history of OEHHA's budget and staffing.

The growth in OEHHA's budget leading up to FY 01/02 was driven by new legislative mandates (i.e. children's health and Public Health Goals). The budget decreased by 28 percent during the following two years despite the fact that these mandates have remained in effect. OEHHA eliminated virtually all its contract support, eliminated all vacant positions, and reduced more than 20 percent of its filled positions through employee attrition to fulfill the budget act control sections reductions.

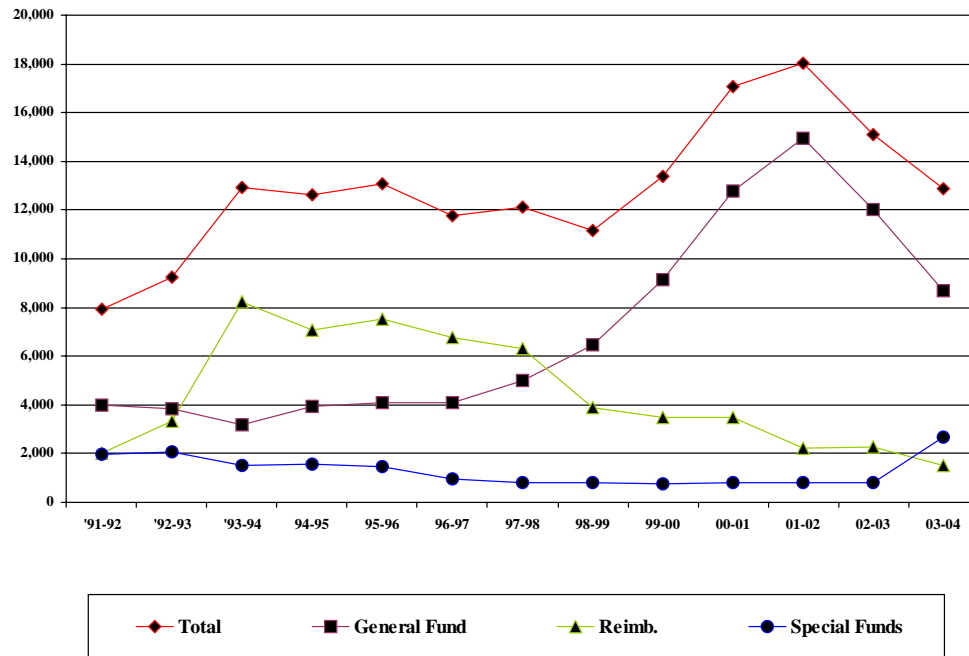
A key objective for OEHHA in seeking fiscal stability is to align its budget more closely with the funding sources of the entities it supports. The General Fund was the source of 50 percent of OEHHA's initial FY 91/92 budget, with special funds and reimbursements contributing 25 percent each. By FY 95/96, 58 percent came from reimbursements, 31 percent from the General Fund and 11 percent from special funds. This funding arrangement led to concerns. The LAO in its report on the 1997-98 budget warned that OEHHA's dependence on reimbursements potentially could compromise its scientific independence. A 2000 report commissioned by Cal/EPA to evaluate its operations also recommended against reimbursements to fund OEHHA's budget. In response, the Legislature appropriated General Fund rather than reimbursements. By FY 01/02, the General Fund provided about 80 percent of OEHHA's support.

OEHHA is now working to stabilize and diversify its funding mix. In FY 03/04, OEHHA's \$12.9 million budget consists of 67 percent General Fund, 22 percent Special Funds, and 11 percent reimbursements. For the first time this year, OEHHA is receiving funds from the pesticide mill assessment and Proposition 65 penalties. However, OEHHA is still substantially affected by General Fund circumstances and is continuing its efforts to identify other special funds to finance its activities.

Attached are two graphs, which depict OEHHA's funding by fund category over its 13-year history, and growth and decline in positions.

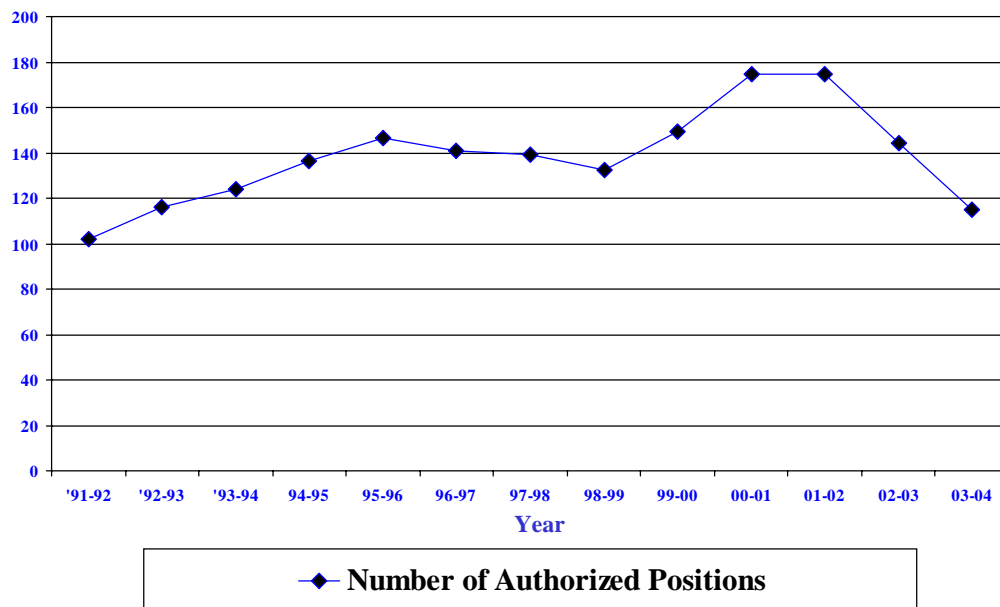
## OEHHA Budget History – 13 Years

(In Thousands)



## Office of Environmental Health Hazard Assessment Number of Positions – 13 Year History

Positions



## **MANDATED RESPONSIBILITIES OF OEHHA'S CORE SCIENTIFIC PROGRAMS**

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In preparing program descriptions for this report, citations in the legislative code or other sources of governing language (such as GRP-1, and administrative and executive orders) have been included. However, specific language is not provided except in limited cases when quotes are excerpted from these sources. The reader should refer to the full text of the relevant codes, which have been compiled in Appendix B.

### **Core Scientific Programs**

#### **Air Toxicology and Epidemiology Section (ATES)**

In general, ATES provides health effects guidance to ARB, air pollution control districts, local health officers and environmental health officers regarding health impacts of air pollutants. OEHHA responds to requests for information on the health effects of chemicals found in the air from both mobile and stationary sources, including chemicals that are already under review, new chemicals planned as replacements for compounds in use in industrial applications, or natural substances such as asbestos that can become airborne during activities that disturb asbestos-containing soils. In addition, OEHHA assists districts in providing risk communication, conducts epidemiological studies on air pollutants, develops health effects information on traffic-related pollutants, and provides emergency support in the event of fires and other disasters that release large quantities of air pollutants.

Children's Health. The Children's Environmental Health Protection Act (Health and Safety Code Section 39606) requires OEHHA to explicitly consider infants and children in making recommendations for the state's ambient air quality standards. OEHHA, in conjunction with ARB, conducted a prioritization of the criteria air pollutants focusing on whether the existing standards were adequate to protect infants and children. The statute requires OEHHA, in conjunction with ARB, to revisit any inadequate standards and provide appropriate health-based recommendations to ARB. OEHHA, in conjunction with ARB, is currently working on recommendations to revise the ozone standard. OEHHA previously worked with ARB to revise the particulate matter and sulfate standards. All of these standards as well as those for NO<sub>x</sub> and CO are necessary to protect the public including infants and children from emissions from automobiles and trucks as well as stationary sources.

The Children's Environmental Health Protection Act also requires OEHHA to develop a list of Toxic Air Contaminants (TAC) that differentially impact children. ARB is required to look at the list developed by OEHHA and revisit any airborne toxic control measures (ATCM) or develop new ATCMs for those chemicals on the list to ensure adequate protection of infants and children. OEHHA has developed the nation's first list of five TACs that disproportionately impact children, and will be updating that list in future years. And finally, the Act requires OEHHA to annually evaluate 15 TACs per year to develop cancer potency factors and reference exposure levels that adequately protect infants and children.

Because these children's health activities are interwoven with OEHHA's more general activities regarding ambient air quality standards and TACs, OEHHA does not have a separate budget category for activities specific to children's health. Instead, OEHHA includes the cost of these activities under the budget entries for TACs and criteria air pollutants.

**Statutes:** Health and Safety Code Sections 39606 and 39669.5.

**Administration Goals:** Focus on children's health. Cut air pollution statewide by 50 percent.

Toxic Air Contaminants. OEHHA is responsible for conducting health risk assessments of non-pesticide chemical contaminants found in air, including those identified as TACs or candidate toxic air contaminants. Sources of toxic air contaminants include tailpipe emissions from motor vehicles and stationary industrial sources. This work is conducted under Health and Safety Code Section 39660, which requires OEHHA to develop the health effects assessment for use by ARB in considering chemicals as TACs. ARB also uses the OEHHA health effects assessments when developing ATCMs designed to reduce emissions and associated health risks.

**Statute:** Health and Safety Code Section 39660 et seq.

**Administration Goals:** Cut air pollution statewide by up to 50 percent. Protect California's air quality standards for industrial facilities and motor vehicles.

Air Toxics Hot Spots Information and Assessment Act. OEHHA is also responsible for implementing portions of the Air Toxics Hot Spots Information and Assessment Act. The Act is designed to provide ARB and the air pollution control districts with information on what chemicals are emitted into the air, the quantity of those chemicals and health impacts. The Act results in a number of facilities conducting emissions inventories and preparing risk assessments. Facilities that create significant health risks are then required to develop and implement risk-reduction plans. Under this mandate, OEHHA has developed and updated risk assessment guidance (and has identified safe exposure levels for various contaminants) for use in these site-specific risk assessments. OEHHA also reviews risk assessments conducted by facilities, and provides written comments to the districts on the accuracy and completeness of the risk assessments.

**Statute:** Health and Safety Code Section 44300 et seq.

**Administration Goal:** Cut air pollution statewide by up to 50 percent. Protect California's air quality standards for industrial facilities.

Criteria Air Pollutants. OEHHA makes health-based recommendations to ARB for Ambient Air Quality Standards. These health-based recommendations are based on an exhaustive evaluation of the epidemiological, medical, and toxicological literature pertaining to the criteria air pollutants (ozone, particulate matter, nitrogen dioxide, sulfur dioxide, carbon monoxide, hydrogen sulfide). ARB considers OEHHA's health-based recommendations in setting the state's Ambient Air Quality standards.

OEHHA also conducts epidemiological investigations of the health effects of criteria air pollutants, such as ozone, oxides of nitrogen, and sulfur dioxide. Such investigations include the health impacts on the more susceptible or sensitive subpopulations such as children, individuals with certain pre-existing health conditions, and the elderly. For example, OEHHA recently conducted an evaluation of the impacts of traffic-related pollutants on children at schools and in

their neighborhoods. This analysis helped form the scientific basis for Senate Bill 352 (Escutia, Chapter 668, Statutes of 2003), which limits school site acquisitions near major roads.

**Statutes:** Health and Safety Code Sections 425 and 39606.

**Administration Goals:** Cut air pollution statewide by up to 50 percent. Expedite clean fuel transportation. Protect California's air quality standards for industrial facilities and motor vehicles.

Indoor Air. Evaluating indoor air quality is also a program function for OEHHA, in which staff scientists evaluate the health effects of chemicals commonly found in indoor air, especially related to recycled products. OEHHA participates in a number of interagency activities designed to evaluate indoor air quality health issues (particularly regarding the use of recycled materials), and to move California toward safer indoor air quality. OEHHA participates in a number of statewide indoor air quality workgroups, including the California Indoor Air Quality Working Group (CIAQWG), and the California Sustainable Building Working Group. The CIAQWG focuses entirely on indoor environmental quality and is administered by DHS. The California Sustainable Building Working Group covers broad areas. OEHHA participates on several subcommittees, including the Portable Classroom Working Group and a work group on environmentally preferable products formed following passage of Assembly Bill 498 (Chan, Chapter 575, Statutes of 2002).

**Statutes:** Public Contracts Code Section 12400 et seq.

**Administration Goal:** Focus on children's health. Save energy through green buildings.

### **Integrated Risk Assessment Section (IRAS)**

IRAS performs a variety of functions that are largely aimed at evaluating risks from "cross-media" contamination, i.e. contaminants that are present in more than one environmental media (air, water, and soil). When OEHHA was created, the primary function of IRAS (previously named the Hazardous Waste Toxicology Section) was to review health risk assessments prepared as part of the remediation process for cleaning up hazardous waste sites in California. In this role, IRAS assisted DTSC on the scientific aspects associated with site clean up. Recently, as DTSC became more self-reliant in this area, IRAS shifted its focus to assist other Cal/EPA boards and departments in similar activities. IRAS also has assumed responsibility for various cross-media programs.

Brownfields and Other Waste Sites. OEHHA currently has agreements with the SWRCB and the Integrated Waste Management Board (IWMB) to provide the regional water quality control boards and the waste board with assistance in evaluating site-specific health risk assessments. OEHHA provides this assistance under its general risk-assessment authority contained in Health and Safety Code Section 59017.

To comply with Senate Bill 32 (Escutia, Chapter 764, Statutes 2001), Cal/EPA has directed OEHHA to initiate a scientific peer review of the risk-based screening levels (RBSL) for chemical contaminants in soil published by the San Francisco Regional Water Quality Control Board. This statute also requires the development of additional RBSLs, which are screening levels that facilitate the cleanup and reuse of urban "brownfield" sites by assisting local developers in assessing possible clean-up costs.

**Statutes:** Health and Safety Code Sections 57008 et seq. and 59017.

**Administration Goals:** Protect California's rivers, bays, and coastline. Protect drinking water. Restore our urban environments. Address brownfield sites.

School site evaluation. OEHHA is required to publish guidance for use by DTSC and other state and local agencies in assessing exposures and health risks to hazardous substances at existing and proposed school sites. The guidance must explicitly address children-specific exposures and sensitivities. Furthermore, OEHHA is required under statute to identify those chemical contaminants that are commonly found at school sites, prioritize them according to degree of concern for child safety, and develop numerical health-based guidance values for all identified contaminants of concern.

**Statutes:** Health and Safety Code Section 901(f)(1).

**Administration Goals:** Focus on children's health. Restore our urban environments.

Fuels. California consumes at least 37 million gallons of fuel each day. ARB is required to oversee the development of a multimedia evaluation of a new fuel specification and consult with other Cal/EPA BDOs before it can create regulations allowing its use in California. Under this scenario, OEHHA is developing the guidance for the evaluation of fuel components and proposed substitutes, to assist ARB in the area of risk assessment. Currently, OEHHA has been reviewing data submissions to ARB on specific fuel additives. This guidance developed for alternative fuels evaluation might be crafted in the future as a first step in a process to assess alternatives for hazardous products as part of an overall pollution prevention approach adopted by Cal/EPA.

In addition, OEHHA has received funding in the current fiscal year from IWMB to investigate the potential health impacts from use of used motor oil as bunker fuel oil. The assessment will be done in a similar manner proposed for the health assessment for alternative fuel additives.

**Statute:** Health and Safety Code Section 43830.8.

**Administration Goal:** Expedite clean fuel transportation. Cut air pollution statewide by up to 50 percent.

Art Hazards. State law prohibits California school districts from purchasing arts and crafts products containing toxic or carcinogenic substances for use in grades kindergarten through six. The law also restricts the purchase of such products in grades 7 to 12, allowing their use only if they bear a label informing the user of the presence of hazardous ingredients, the potential health effects, and instructions for safe use for the art or craft products. OEHHA is required to develop a list of art or craft materials that cannot be used in kindergarten through sixth grade, and a list of

materials which, while not currently sold or manufactured, may be reasonably suspected to still exist at some schools. OEHHA is responsible for periodically updating the lists as it deems appropriate.

**Statutes:** Education Code Section 32066 et seq.

**Administration Goal:** Focus on children's health.

Cal/EPA Border Coordinator Project. OEHHA assists the Cal/EPA Border Coordinator in educating members of the general population along the border on ways to reduce exposures to toxic chemicals through the development of an educational and outreach program. Providing risk assessment and toxicological assistance to local government and the public is a core activity of OEHHA, and OEHHA has been active in this area since the early 1990s as part of Cal/EPA's efforts along the border. OEHHA provides risk assessment training and advice to professionals, officials, community leaders, and others along the border. This training assists local officials in identifying and prioritizing sites with significant pollution.

**Administration Goal:** Protect California's rivers, bays, and coastline. Protect drinking water. Cut air pollution statewide by up to 50 percent.

Environmental Protection Indicators for California (EPIC). The EPIC project is a collaborative effort involving Cal/EPA and its boards and departments, the Resources Agency and DHS. EPIC develops and maintains "environmental indicators" (measurements of environmental conditions) to provide an improved understanding of the health of California's environment and to aid in policy and budgetary planning. In April 2002, OEHHA, in its role as the lead agency for EPIC, produced a report that established a process and criteria for indicator selection and an initial set of 84 environmental indicators. Assembly Bill 1360 (Steinberg, Chapter 664, Statutes 2003), mandates this lead role for OEHHA. No funding was allocated to EPIC during the current fiscal year. Restoration of EPIC funding in the future will enable Cal/EPA to better evaluate the effectiveness of its environmental programs and to improve its policy and budgetary decision-making.

**Statute:** Public Resources Code Sections 71080-71082.

**Administration Goal:** Cut air pollution statewide by up to 50 percent. Protect California's rivers, bays, and coastline. Protect and restore California's parks and open spaces. Restore our urban environments.

### **Pesticide and Environmental Toxicology Section (PETS)**

PETS is responsible for fulfilling mandated responsibilities in three major areas: drinking water, sport fish, and pesticide use and safety. Inherent to these mandated responsibilities is the need to provide technical support and documentation to other Cal/EPA BDOs, other state agencies such as the DFG and DHS, and local and federal agencies.

Pesticide Use and Safety. OEHHA has three major functions in the area of pesticide use and safety evaluation: 1) human illness investigation, 2) toxicology and risk assessment, and 3) evaluation of pesticide worker safety.



- 1) OEHHA investigates and evaluates pesticide illness episodes in areas where pesticide applications and offsite drift have resulted in illness complaints and hospitalizations. As part of its responsibilities, OEHHA designs the pesticide illness reporting form that physicians are required by law to complete if they suspect a pesticide-related illness. In addition, OEHHA physicians provide technical support and training for physicians and health professionals in the recognition and management of pesticide poisoning.
- 2) OEHHA conducts independent reviews of pesticide toxicity data, assesses the health impacts of pesticide use, prepares findings on the health effects of pesticide toxic air contaminants, and conducts peer reviews of risk assessments prepared by the Department of Pesticide Regulation (DPR). OEHHA may provide advice and recommendations to DPR concerning human health risks posed by pesticides that are under evaluation. DPR is required to seek OEHHA's concurrence before granting approval for data waivers. DPR, in consultation with OEHHA, may develop regulations relating to modifications of mandatory health effect studies.

As part of the registration process for pesticide active ingredients, OEHHA reviews petitions submitted by pesticide manufacturers to waive mandatory health effects studies. (For some pesticides, the submission of these test results is cost-prohibitive.)

- 3) OEHHA and DPR work jointly to develop regulations and worker protection standards. This includes concurrent review of experimental designs to measure agricultural worker exposure to pesticides. The functions and activities listed above are integral to the development of worker health standards and regulations. OEHHA also advises medical supervisors involved in implementing California's program of biomonitoring (blood screening) of pesticide mixer/loader/applicators for exposure to pesticides.
- 4) DPR, in cooperation with OEHHA, is required to assess dietary risks associated with the consumption of produce and processed foods treated with pesticides. In order to fulfill this mandate, data on acute effects and the mandatory (chronic) health effects studies must be reviewed, appropriate dietary consumption estimated, and relevant residue data based on monitoring and field experimental and food technology information be considered to quantify consumer risk.

**Statutes:** Health and Safety Code Sections 105200 et seq. and section 59004, Food and Agricultural Code Sections 11454.1, 12980 et seq., 13126, 13129, 13130.3, 13131.2(b), 13134, 14022 and 14023.

**Administration Goals:** Cut air pollution statewide by up to 50 percent. Protect drinking water.

Drinking Water Evaluation. OEHHA evaluates and quantifies human health risks from chemical contaminants in drinking water; many drinking water contaminants are associated with both cancer and noncancer health effects. These activities include developing health advisories, action levels, and public health goals (PHG) for chemical substances in drinking water, as well as providing toxicological assistance for chemical monitoring activities for the drinking water supply. OEHHA is required to develop PHGs for contaminants in California's publicly supplied drinking water. A PHG is the level of a chemical contaminant in drinking water that does not pose a significant risk to health. PHGs are not regulatory standards; however, state law requires DHS to set drinking water standards for chemical contaminants as close to the corresponding

PHG as is economically and technically feasible. In addition, newly enacted legislation (Assembly Bill 1747, Committee on Budget, Chapter 240, Statutes of 2003) requires OEHHA to provide consultation to DHS in developing health-based criteria for evaluating grant applications and prioritizing water quality management projects to be funded by Proposition 50 bond monies.

**Statute:** Health and Safety Code Section 116365, Water Code Section 7932 and 79534.

**Administration Goal:** Protect drinking water.

Fish and Water Quality. OEHHA has the following responsibilities in the area of fish, wildlife and water quality:

- 1) Under state law, OEHHA evaluates chemical contaminants in fish and wildlife, and develops fish and wildlife consumption health advisories. Fish consumption advisories are published in the California Sport Fish Regulations and in OEHHA's California Sport Fish Consumption Advisories booklet. Consumption advisories are intended to provide anglers, hunters and their families with guidance concerning the safe consumption of fish and wildlife that may contain elevated levels of methylmercury and other toxic chemicals. These fish advisories also inform SWRCB's water quality assessments and help determine impaired water bodies. OEHHA assists SWRCB in developing a comprehensive monitoring and assessment plan for sport fish along the California coast. In addition, OEHHA can recommend that DFG close commercial fishing areas due to contaminants in the fish. OEHHA participates in the Bay Protection and Toxic Hot Spots Program specifically to evaluate the public health impacts of chemical contaminants from fish and shellfish consumption. OEHHA's risk assessments have been used to develop a sediment quality strategy, identify and characterize "hot spot" areas of elevated contamination, and develop a water quality cleanup plan for enclosed bays and estuaries.
- 2) OEHHA participates with DPR and SWRCB in hearings to review the evidence of groundwater pollution by a pesticide and to make health-based recommendations for remediation. In this capacity, OEHHA staff review the current status of the pesticide well monitoring database managed by DPR, requesting supplemental information when necessary, and performing analyses when exposures might be of concern for the general public or susceptible populations.

**Statutes:** Water Code Sections 13177.5, 13985 et seq. and sections 13392-13339.5, Food and Agricultural Code Sections 13134, 13141 et seq., and Fish and Game Code Section 7715.

**Administration Goal:** Protect California's rivers, bays, and coastline. Protect the integrity of our coast.

### **Reproductive and Cancer Hazard Assessment Section (RCHAS)**

RCHAS provides scientific support for Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), and guidance for identifying chemicals that cause cancer, birth defects, and ecological damage. RCHAS also assists other OEHHA programs in evaluating chemicals, which promotes efficiency and consistency in addressing some of the most onerous and complex toxicants facing the department and state. RCHAS also is developing guidelines for children's cancer risk assessments.

Technical Support for Proposition 65. Proposition 65 requires the Governor to publish, and update at least annually, a list a chemicals known to the State to cause cancer or reproductive toxicity. Chemicals that appear on the list become subject to a warning requirement and a prohibition against discharges into sources of drinking water. OEHHA has been the lead agency for implementation of Proposition 65 since its establishment in 1991. As its primary function, RCHAS provides scientific support in the implementation of Proposition 65 by accomplishing the following:

- 1) Maintaining the list of chemicals known to cause cancer or reproductive toxicity (currently 483 carcinogens and 269 reproductive toxicants) through identification and evaluation of data for consideration by the State’s qualified experts on chemicals being considered for listing or removal from the list.
- 2) Identifying and evaluating chemicals for addition to the Proposition 65 list, and reviewing and responding to comments received during public comment periods.
- 3) Developing “safe harbor” levels for listed chemicals through quantitative dose-response assessment (currently there are 258 adopted and 11 proposed safe harbor numbers), which provide businesses, public-interest groups and law enforcement with guidance as to when businesses must provide warnings concerning exposure to Proposition 65 chemicals.
- 4) Prioritizing and compiling scientific information on chemicals under consideration for listing by either of two independent Proposition 65 scientific panels.
- 5) Providing scientific and technical support to the Attorney General’s Office in enforcement actions.
- 6) Developing safe use determinations for listed chemicals, and interpretive guidelines for Proposition 65.

**Statute:** Health and Safety Code Section 25249.5 et seq.

**Administration Goal:** Protect drinking water. Protect California’s air quality standards for industrial facilities.

Children’s Health. OEHHA is responsible for developing children’s cancer guidelines, and updating these guidelines as needed. Under this mandate, OEHHA is developing cancer risk assessment guidance and methodology that explicitly addresses cancer risk due to carcinogen exposures to the fetus, infants and children.

**Statute:** Health and Safety Code Section 901.

**Administration Goal:** Focus on children’s health.

## RECOMMENDATIONS FOR FUNDING SUPPORT

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OEHHA's primary fiscal objectives at the present time are:

- Obtain sufficient funding to allow OEHHA to efficiently and effectively comply with its mandates. To fully comply with its statutory mandates, OEHHA requires total annual funding of \$20.3 million and 157.4 positions. (See Appendix C for detailed workload matrixes.) OEHHA's current staffing is at critical mass, and cannot absorb further reductions.
- OEHHA recommends the realignment of its funding base to more closely reflect the risk management programs that implement OEHHA's risk assessments.

Of the six Cal/EPA BDOs, OEHHA is by far the most dependent on General Fund. In FY 01/02, the General Fund provided approximately 80 percent of OEHHA's support. In FY 03/04, OEHHA reduced its dependence on the General Fund to 67 percent of its budget, but this number is still too high. Other Cal/EPA boards and department derive a much more significant percentage of their budget from special funds. Because OEHHA's primary function is to provide critical scientific support to Cal/EPA programs, it makes little sense for OEHHA to have significantly different funding sources than its sister entities. Regulatory programs need to know their goals in reducing environmental contaminants to levels that are public health protective.

OEHHA has developed four options to diversify funding. Options 1, 2, and 3 propose the elimination of all General Fund support for OEHHA. Option 4 would retain some General Fund support while shifting the bulk of OEHHA's revenue sources to special funds. Because OEHHA provides scientific support to Cal/EPA's risk management programs, it is appropriate for OEHHA to receive revenues from the same special funds that support those risk management programs. However, it should be noted that utilizing most of the special funds without increasing the associated fees would negatively impact the other Cal/EPA boards and departments through potential program reductions.

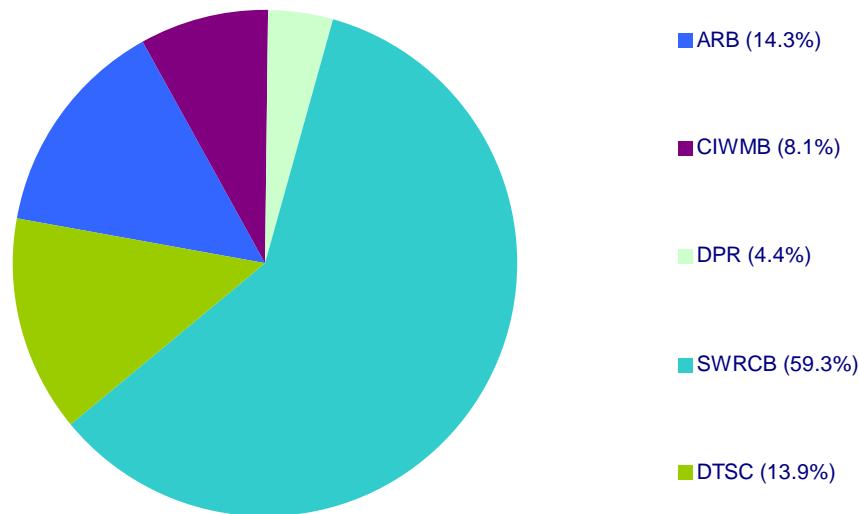
These four funding options are:

1. Direct funding from special funds that support Cal/EPA boards and departments based on their respective budgets. This option proposes that OEHHA receive 100 percent of its funding (at whatever level the Legislature determines in the annual budget act) via direct appropriations from special funds that also support the other Cal/EPA BDOs. The percentage of OEHHA support from each BDO would reflect that BDO's percentage of the total Cal/EPA budget. For example, the budgets of the SWRCB and nine regional water quality control boards comprise approximately 59 percent of Cal/EPA's total budget and, therefore, SWRCB-related fund(s) would fund 59 percent of OEHHA's budget.

If OEHHA were to receive its full recommended funding of \$20.3 million to meet its statutory mandates and other critical requirements, it would receive the following from

each BDO: SWRCB, \$12.0 million; ARB, \$2.9 million; DTSC, \$2.8 million; IWMB, \$1.6 million; and DPR, \$1.0 million.

## Office of Environmental Health Hazard Assessment OPTION #1



**Total Budget \$20,325K**

**Pros:** The mix of funding sources would reinforce OEHHHA's primary responsibility as the scientific advisor to the five other Cal/EPA boards and departments. OEHHHA's budget would reflect the environmental priorities of the Governor and the Legislature; the BDOs with the largest budgets would make the largest contributions to OEHHHA.

OEHHHA would not be dependent on any direct funding from the General Fund.

**Con:** There would be some inconsistency between OEHHHA's mix of funding sources and its expenditures by activity. For example, SWRCB would contribute significantly more to OEHHHA's budget than ARB, even though OEHHHA currently provides more direct support to ARB. Also, some of OEHHHA's mandates benefit all Californians (e.g. Proposition 65) which argues for some amount of General Fund.

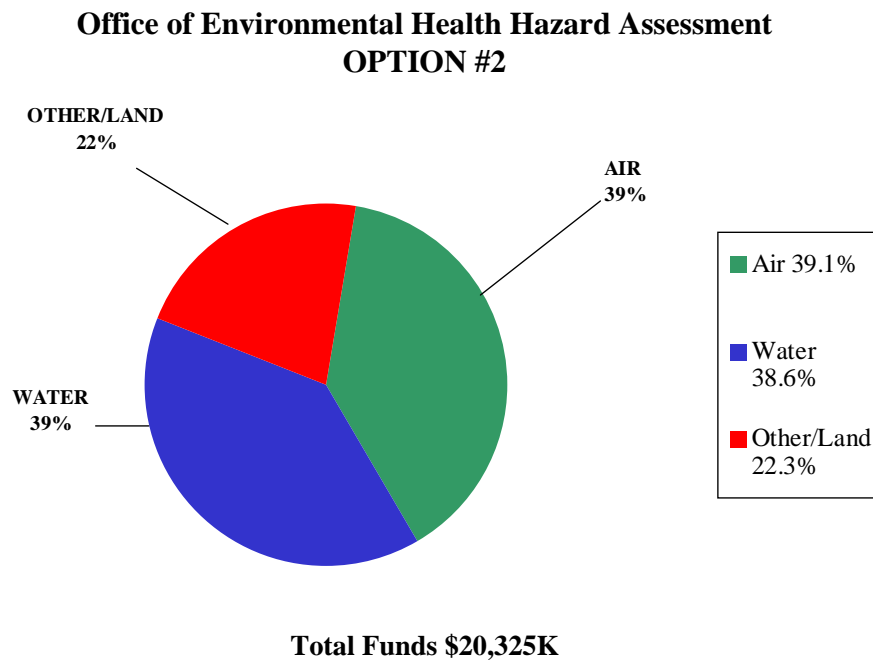
Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

2. Direct funding from special funds that support Cal/EPA boards and departments based on OEHHHA's expenditures in program/media (i.e., air, water, land and other) areas. This option also proposes that OEHHHA support would reflect the percentage of OEHHHA's expenditures relating to the media (air, water, land) that falls within a regulatory jurisdiction. For example, the percentage of OEHHHA revenues received from funds that

support ARB would reflect the percentage of OEHHA revenues relating to air contaminants.

Under a full-funding option of \$20.3 million, OEHHA would receive approximately \$7.7 million from ARB, \$7.5 million from SWRCB, and approximately \$5.1 million in total from DTSC, DPR, and IWMB.

One possible variation of this option would allow OEHHA to receive direct funding from state entities outside of Cal/EPA. For example, because DHS uses OEHHA's PHGs for drinking water, OEHHA would receive a certain level of direct funding from DHS.



**Pros:** The mix of OEHHA's funding sources would reflect its expenditures by activities. For example, approximately 39 percent of OEHHA's revenues would come from the air-quality arena, properly reflecting that air-quality activities comprise about 39 percent of OEHHA's workload.

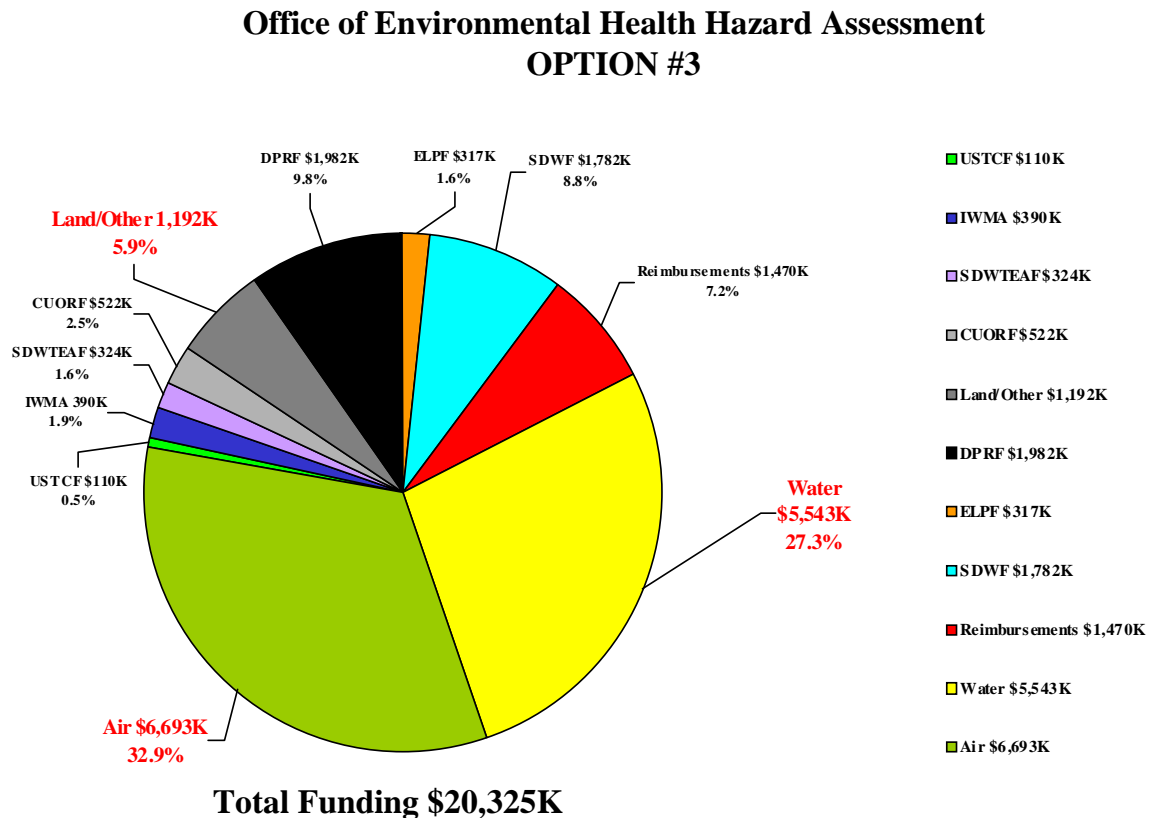
OEHHA would not be dependent on any direct funding from the General Fund.

**Cons:** While the nexus between OEHHA's expenditures by activity and the special fee appropriations might be clearer in many cases than in Option 1, OEHHA has program mandates where General Fund is appropriate.

Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

3. Mix of special fund appropriations from special funds that support Cal/EPA BDOs and other state departments. This option is essentially a refinement of Option 2, with OEHHA's existing special funds augmented in accordance with OEHHA's program costs by media (air, water, land).

Under this option, OEHHA would continue to receive funding from existing special funds. This would account for \$6.9 million, or 34 percent of a fully funded \$20.3 million budget. The remaining \$13.4 million, or 66 percent of the budget, would come in direct payments from the other Cal/EPA BDOs and other state departments as described in Scenario 2.



**Pros:** OEHHA would not be dependent on any direct revenues from the General Fund, and would therefore be protected from any volatility in the General Fund.

The diversity of funding sources would promote fiscal stability and minimize the consequences to OEHHA of a significant decline in available funding from any one source.

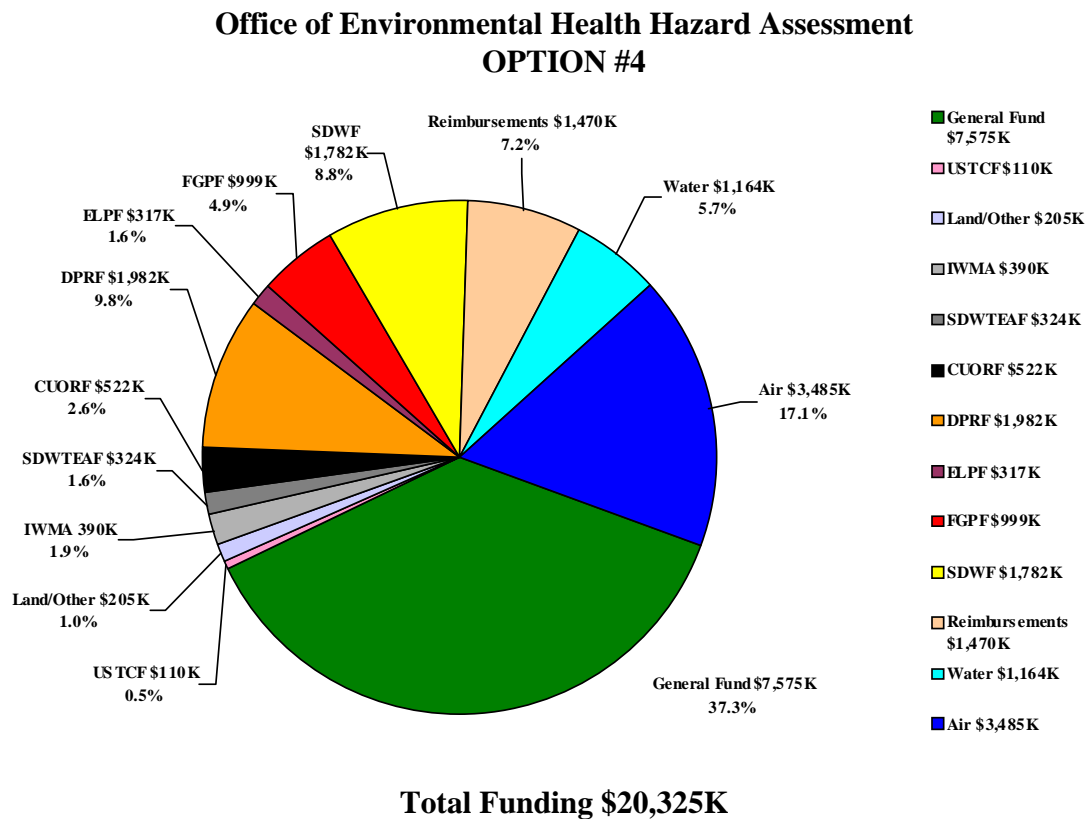
There would be a clearer nexus between OEHHA's expenditures and revenues from special funds, as OEHHA would maintain the mix of special fund sources in the current-year budget.

**Cons:** OEHHA's budget would be vulnerable to volatility in one or more special funds that provide OEHHA with its revenues.

OEHHA would be heavily dependent on special funds that can only finance a very specific range of activities. As a result, OEHHA's budget could be somewhat inflexible. For example, it might be difficult to shift funding from air-related activities to water-related activities if the need ever arose because air-program funds could not be used to finance water-related activities. Similarly, it might be difficult to obtain funding for general activities that lack a nexus with any special funding source, therefore making General Fund more appropriate.

Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

4. **Retain current special fund sources and add additional special fund sources while continuing to receive some General Fund.** This option proposes that OEHHA keep its current special fund sources, and replace a large portion of its General Fund with additional special fund appropriations from Cal/EPA BDOs, as well as other state departments. This option is similar to Option 3, except that OEHHA would continue to receive some revenues from the General Fund. OEHHA proposes that it receive \$7.6 million in General Fund, which would constitute 37 percent of the recommended \$20.3 million budget. The remainder of the budget would consist of special funds (\$6.4 million, 32 percent of budget), \$1.5 million reimbursements, (7 percent of budget), and appropriations from other state departments (\$4.8 million, 24 percent of budget).





**Pros:** This option offers the greatest diversity of funding sources of the four options, and would therefore provide OEHHA with the most fiscal stability. This option would minimize the consequences to OEHHA of a significant decline in available funding from any one source.

There is a nexus between OEHHA's mix of funding sources and expenditures by activity. General Fund could be directed to activities lacking a nexus with a special fund source.

This option also provides OEHHA with considerable budgetary flexibility. The General Fund could potentially finance a rapid increase in any OEHHA activity if such a need ever arose. Similarly, General Fund could be directed to activities lacking a strong nexus with a special funding source.

**Cons:** Over one-third of OEHHA's budget would remain vulnerable to volatile changes in the General Fund. A significant decline in available General Fund monies could adversely impact OEHHA.

Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

#### **Recommendation:**

OEHHA's preferred option is Option 4 because it would diversify funding sources and stabilize core programs. Under this option for a \$20.3 million total budget, OEHHA would directly receive at least \$12.8 million from special funds for specific activities relating to the objectives of those funds, as well as General Fund for general activities that are not directly tied to a special fund.

**Note: The total resources of \$20.3 million and 157.4 positions do not include a full complement of Distributed Administration or Program Administration. Therefore, to the extent resources are added to OEHHA's budget, there would also need to be a complementary level of administrative resources added as well.**

## PROGRAM EFFICIENCIES

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OEHHA makes the following recommendation to improve efficiencies in its operations:

- 1) *Initiate new processes.* OEHHA is implementing new, streamlined processes for prioritizing the evaluation of chemicals for two key programs. These processes will better ensure that OEHHA's limited resources are directed toward evaluation of the chemicals that pose the greatest concern for public health.

In December 2004, OEHHA announced a revised procedure for prioritizing the evaluation of candidate chemicals for placement on the Proposition 65 list of substances that cause cancer and reproductive toxicity. Under this new procedure, OEHHA will no longer select chemicals at random for further screening and evaluation. Instead, OEHHA will present candidate chemicals to the two Proposition 65 independent scientific panels, which will consider public comments prior to determining which chemicals should undergo full evaluation for possible listing. This new procedure will help ensure that Proposition 65 evaluations focus on chemicals that pose the greatest concerns to Californians because of their toxicity and the extent of human exposure to them.

OEHHA is also initiating an informal procedure for review of its PHGs for drinking water contaminants. State law requires OEHHA to review and, if appropriate, revise each PHG at least every five years. In some instances, a detailed review of a PHG is not necessary, because the chemical in question either is not found in California's publicly supplied drinking water, or there have been no new scientific developments concerning that chemical. In those cases, staff will forego an extended review of the chemical, allowing resources to be focused on chemicals that are more prevalent in drinking water or for which there is new scientific information.

## ACRONYMS

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APCF	Air Pollution Control Fund
ARB	Air Resources Board
ATCM	Airborne Toxic Control Measures
ATES	Air Toxicology and Epidemiology Section
ATIAA	Air Toxic Inventory and Assessment Account
BDO	Boards, Departments, and Office
Cal/EPA	California Environmental Protection Agency
CIAQWG	California Indoor Air Quality Working Group
CTRMF	California Tire Recycling Materials Fund
IWMB	Integrated Waste Management Board
DFG	Department of Fish and Game
DHS	Department of Health Services
DPR	Department of Pesticide Regulation
DPRF	Department of Pesticide Regulation Fund
DTSC	Department of Toxic Substances Control
ELPF	Environmental License Plate Fund
EPIC	Environmental Protection Indicators for California
FGPF	Fish and Game Preservation Fund
GF	General Fund
GRP-1	Governor's Reorganization Plan No. 1
HWCA	Hazardous Waste Control Account
IRAS	Integrated Risk Assessment Section
IWMA	Integrated Waste Management Account
LAO	Legislative Analyst Office
MVA	Motor Vehicle Account
NAS	National Academy of Sciences
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
PETS	Pesticide and Environmental Toxicology Section
PHG	Public Health Goal
RCHAS	Reproductive and Cancer Hazard Assessment
SDWA	Safe Drinking Water Account
SDWTEAF	Safe Drinking Water Toxic Enforcement Act Fund
SWQCF	State Water Quality Control Fund
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TSCA	Toxic Substances Control Account
UORF	Used Oil Recycling Fund
USTCF	Underground Storage Tank Cleanup Fund
WDPF	Waste Discharge Permit Fund

**Appendix A**  
**Governor's Reorganization Plan**  
**Number One**  
**April 1991**  
**Creating the California Environmental Protection Agency**

**Introduction**

The creation of a California Environmental Protection Agency is among my highest priorities. To assist in this task, the Secretary for Environmental Protection has met with many of those most immediately concerned with California's environmental future--including industry, agriculture, public health officials, environmental organizations, members of the Legislature and staff, and other parts of my Administration--both in Sacramento and throughout the state. He has also reviewed numerous written proposals and opinions, which have been provided.

On April 5, 1991, the Secretary circulated a draft Cal- EPA proposal for review and comment. Many helpful comments were received, and those comments have informed the proposal that I put before you today.

**Objectives of Proposed Agency**

This proposal for creation of a California Environmental Protection Agency should be evaluated in the context of the environmental protection goals I have laid out for my Administration, including the following:

**First**, our most urgent attention must be turned toward those activities, processes and substances presenting the greatest risk to public health and the environment.

**Second**, decisions to set risk-based priorities must be based on rigorous and internally consistent science, at the level widely recognized to be the best available.

**Third**, we must act to prevent the creation of pollution in the first instance--it is not sufficient, from an environmental or economic standpoint, to focus solely on pollution as it exits the pipe or the stack.

**Fourth**, environmental protection and economic progress should not be viewed as competing goals, but, to the greatest possible extent, as complementary. Where traditional command and control regulation can be effectively supplemented or supplanted by environmentally protective and legally enforceable market incentive arrangements, we should do so. We should also encourage research and development of environmentally protective technologies, and strive to harness the energy of the free market for environmental improvement. The government should provide information, working alongside profit and non-profit enterprises, which can enable private businesses-- particularly small businesses--to move toward production processes, which are at once environmentally protective and economically successful.

**Fifth**, vigorous, predictable enforcement must undergird all of our efforts. Enforcement not only protects the public health, but it also assures that good corporate citizenship is not undercut by ill-gotten gains accruing to unscrupulous competitors. An enforcement mindset should also inform the entire regulatory process, making certain that theoretical, environmentally beneficial notions lead to real-time results. An enforcement focus has the added benefit of leading to regulations that are simpler and more reflective of actual field experience--because a regulation that is difficult for the regulated community to decipher and comply with is also difficult for the government to enforce.

**Sixth**, the regulatory decision-making process must be opened as far as possible to the public as a whole. We should seek consensus with and support from the national government, other parts of state and local government, the legislature, industry, agriculture, environmental groups, and concerned citizens.

There is no question that a unified California Environmental Protection Agency would improve our ability to achieve these goals. In addition, a Cal-EPA would:

- create a primary point of accountability for state environmental programs;
- assure that there is a Cabinet-level voice for environmental protection across the gamut of issues raised for the Governor's consideration and decision;
- allow for more rapid deployment of coordinated government action to meet environmental needs; and
- lead to the reduction of overlapping and redundant bureaucracies which create more confusion than environmental improvement.

### **The Scope and Process of Reorganization**

Many people see, from very different vantage points, that environmental improvement can indeed result from a unified, accountable Cal-EPA. The next question is what should the scope of the reorganization entail?

I have previously identified several areas, which should be included within a Cal-EPA:

- The Air, Water and Integrated Waste Management boards should be more effectively coordinated within a Cal-EPA, while maintaining their independent status;
- Pesticide regulatory programs presently within the Department of Food and Agriculture should be shifted to a Cal-EPA; and
- Chemical risk assessment and toxics regulation programs from the Department of Health Services should be transferred.

In addition to the derivative issues arising from transfer of these areas, there are additional possible areas which could well be included within an "environmental" agency. At the same time, as the number of areas considered for immediate transfer grows, there is a trade-off in terms of process and the speed within which a Cal-EPA could be initiated. In short, as one knowledgeable observer noted, we could spend many months--perhaps years--adjusting

bureaucratic boxes in search of the "ideal" organization. The alternative approach, which is preferable, is to act rapidly to create an initial Cal-EPA possessing basic functions, to be followed with consideration of additional responsibilities. This approach, which might be called a "rolling reorganization," would assure that we get to the real work of environmental improvement as soon as possible.

### **The California Government Reorganization Process**

In 1967, the Legislature statutorily recognized the Governor's authority to reorganize the executive branch, enumerating an "Executive Reorganization" process. That process begins with the Governor's submittal of a reorganization plan to the Little Hoover Commission, which examines the plan and reports its findings to the Legislature. After 30 days, the Governor may submit the plan to the Legislature. The plan then becomes law at the end of 60 days of legislative session, unless it is vetoed by a majority vote of either the Assembly or the Senate. The Executive Reorganization process was created for instances like this--where there is a need for rapid executive action and potential for general agreement on key issues. The process, and the potential for consensus, led to my preference for a limited initial plan, to be followed by legislation on additional specifics in the future. Many elements of my plan for a Cal-EPA are also found in Cal-EPA legislation proposed by Senator Torres, Assemblyman Sher and others.

### **The California Environmental Protection Agency and Its Functions**

With this background, it is proposed that Cal-EPA consist of the following:

- The Office of the Secretary for Environmental Protection;
- The Air Resources Board;
- The Integrated Waste Management Board;
- The State Water Resources Control Board (including the Regional Water Quality Control Boards);
- The Department of Toxic Substances Control (the Toxic Substances Control program, transferred intact from the Department of Health Services);
- The Department of Pesticide Regulation (the Pesticide Regulation program, transferred intact from the Department of Food and Agriculture); and
- The Office of Environmental Health Hazard Assessment (specified "environmental" functions of the Health Hazard Assessment Division, transferred from the Department of Health Services).

More specifically, the proposed components include:

#### **A. Office of the Secretary:**

**1. Management Goal:** The Secretary will serve as the primary point of accountability, reporting directly to the Governor, for the management of environmental protection programs. The Office of the Secretary will bring together functions which cut across the various programs designed to address pollution in a specific medium, e.g., air, surface water, ground water, land disposal, etc.

**2. Proposed Functions:** The Office will fulfill the Agency Secretary role for the Boards, Departments and Offices within Cal-EPA. The Secretary will advise the Governor on, and assist in the implementation of, major policy and program matters. The Office of Secretary will also serve as the principal communication link between the Governor and the constituent units of the Agency.

Cross-cutting and coordination responsibilities will be reposed with the Office. To assist in the fulfillment of these responsibilities I intend to establish, via Executive Order, an Environmental Policy Council chaired by the Secretary and including the heads of the constituent Boards, Departments and Offices, and the Governor's Office of Planning and Research. The Council, which will be created on the effective date of this Reorganization Plan, will assist the Secretary in coordinating the implementation of environmental programs, and will develop recommendations for the Governor and the Legislature as to actions necessary to effectively protect and enhance the environment of the state.

Specific functions to be performed within the Office of the Secretary will include budget review, review of personnel management, intergovernmental liaison (including the legislature, local and national governments, and other parts of the state executive branch), enforcement coordination, information management coordination, strategic planning and pollution prevention, a public advisor role, and public information and communication. There will also be a science advisor to the Secretary to assist in consideration of the range of scientific issues. The science advisor will serve as a liaison with outside scientists, and will assure that risk assessment procedures used by the Agency are in conformance with the best available scientific guidance, including, for example, recommendations of the National Academy of Sciences report, Risk Assessment in the Federal Government: Managing the Process (1983).

To the greatest possible extent, the Office of the Secretary will be budgeted from sources currently funding the Office of Environmental Affairs, the toxics program and the pesticides program. The Office also will make use of personnel on rotating assignments from the Agency's constituent boards and departments--which is not only economical, but will also instill a cross-media approach.

### **3. Transferred Functions and their Origins:**

Authority for Agency Secretary oversight of the Air Resources Board, Water Resources Control Board, and Integrated Waste Management Board is transferred from the Resources Agency. Authority to advise the Governor on policies affecting those Boards, and serve as the principal communications link between the Governor and the Boards, is transferred from the Chairperson of the Air Resources Board. Staff and budget authority housed in the Environmental Affairs Program of the Air Resources Board, which support the Chairperson's former communication and policy advisor role, likewise will be transferred to the Office of the Secretary of the Cal-EPA.

Authority for Agency Secretary oversight of the Toxic Substances Control program, and specified portions of the Health Hazard Assessment Division, is transferred from the Secretary for Health and Welfare.

Authority to oversee the activities of the Pesticide Regulation program is transferred from the Director, Department of Food and Agriculture.

## **B. Air, Water, and Integrated Waste Management Boards:**

**1. Management Goal:** To include within the Cal-EPA those entities responsible for air, water, and solid waste management programs, and to provide the Office of the Secretary with the coordination authorities described in the previous section concerning the Office of the Secretary, consistent with the independent status of the Boards. The Air Resources Board, the Water Resources Control Board and the Integrated Waste Management Board have each been a part, in functional terms, of the predecessor Environmental Affairs unit, and clearly belong within a successor organization.

**2. Proposed Functions:** With the exception of the Environmental Affairs Program within the Air Resources Board, which will be transferred to the Office of the Secretary, all existing functions of each of the three Boards will be retained by the Board that currently performs the function.

**3. Transferred Functions and their Origins:** The reorganization proposal does not transfer any functions to the three Boards. The Environmental Affairs Program within the Air Resources Board will be transferred from the Air Resources Board to the Office of the Secretary.

## **C. Department of Toxic Substances Control:**

**1. Management Goal:** The Toxic Substances Control program, including state Superfund and Resource Conservation and Recovery Act functions, are wholly environmental functions, and should be transferred to the new Cal-EPA. To minimize programmatic disruption, the Toxic Substances Control Program should be transferred intact to the new Agency.

**2. Proposed Functions:** All existing functions of the Toxic Substances Control program in the Department of Health Services, including the assessment of risks associated with alternative cleanup strategies at specific sites, will be included within the Cal-EPA as a Department.

**3. Transferred Functions and their Origins:** All existing functions of the predecessor unit will be transferred.

## **D. Department of Pesticide Regulation:**

**1. Management Goal:** I am committed to moving the pesticide regulatory function from the Department of Food and Agriculture to the Cal-EPA. There are strong linkages between pesticide regulation and other environmental regulatory programs which would be strengthened by this move. To minimize programmatic disruption, the pesticide regulatory program should be transferred intact to the new Agency.

**2. Proposed Functions:** All existing functions of the Pesticide Regulation program will be within Cal-EPA, including the pesticide registration, medical toxicology, worker health and



safety, environmental monitoring and pest management, pesticide enforcement, and information services branches. Field enforcement will remain with county agricultural commissioners, who for this purpose will have a reporting relationship with this Department. To assure that statutory requirements concerning consideration of societal benefits of pesticides are fulfilled in the Agency risk management process, written consultation with the Department of Food and Agriculture will be undertaken, and such documents will be made available for public review.

**3. Transferred Functions and their Origins:** All existing functions of the predecessor unit would be transferred.

## **E. Office of Environmental Health Hazard Assessment:**

**1. Management Goal:** The Office of Environmental Health Hazard Assessment (OEHHA) will provide information to environmental regulators and the public about the adverse health effects that result from environmental exposures to noninfectious agents. The proposed organizational placement of the Office, to become a freestanding entity parallel to the risk management programs, represents a significant elevation from its current division status. The proposed structure of this Office will provide functional and organizational separation of risk assessment from risk management, while providing the Agency with the tools needed to achieve its mission of environmental protection. This approach is consistent with the recommendations of the landmark National Academy of Sciences study, **Risk Assessment in the Federal Government: Managing the Process**. At the same time as environmental risk assessment responsibilities will move from the Department of Health Services to the Cal- EPA, related public health responsibilities will remain with DHS, thereby maintaining strong roles and capabilities within that Department.

**2. Proposed Functions:** The function of OEHHA will be to evaluate the health risks of chemicals in the environment. To this end, OEHHA will provide information to environmental regulators and the public about the health effects that result from environmental exposures to noninfectious agents. Emphasis will be placed on the synergistic and cumulative effects of total exposure from all pollution sources. OEHHA will identify, quantify, and recommend health-based standards for chemicals in the environment, and provide technical and scientific support, consultation, and training to state regulators, local government agencies, and the public. OEHHA will also develop scientific policies and guidelines for risk assessment procedures for the Secretary. Finally, OEHHA will provide oversight of regulatory activities and guidance on scientific aspects of environmental protection.

Specific OEHHA activities will focus on chemicals in air, water, food, solid and hazardous waste, fish, sediment, and certain consumer products, as well as chemicals subject to the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

OEHHA will contain the following organizational units, comprising the "environmental" components of the current Health and Hazard Assessment Division of the Department of Health Services:

**The Proposition 65 Implementation Office.** The HHAD division office houses the implementation of Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986. HHAD serves this function for the Health and Welfare Agency, which currently is the lead agency for implementing the Proposition. On the day that this Reorganization Plan takes effect, I will, via Executive Order, designate the Cal-EPA as lead agency for Proposition 65 implementation.

In its Proposition 65 role, the office convenes the Cabinet Level Working Group which provides advice on the implementation of Proposition 65. This working group consists of Secretaries and Directors from the Office of Environmental Protection, Department of Health Services, Department of Food and Agriculture, Department of Industrial Relations, the Business, Transportation and Housing Agency, and the Resources Agency. The office convenes the Scientific Advisory Panel, updates the list of chemicals known to the State of California to cause cancer or reproductive toxicity, promulgates regulations, and provides information to interested parties about Proposition 65.

The office coordinates Proposition 65 related activities and interacts with staff in the Department of Food and Agriculture pesticide program, the State Water Resources Control Board, the Air Resources Board, and several Department of Health Services components including the Office of Drinking Water, the Division of Laboratories, and the Toxic Substances Control Program. It interacts with the Attorney General's Office on enforcement matters.

**The Hazardous Waste Toxicology Section (HWTS).** The HWTS, currently in HHAD's Environmental Epidemiology and Toxicology Branch, performs the following functions: (1) It provides public health oversight for the criteria and standards developed by the Toxicology and Risk Assessment Section of the Toxic Substances Control Program. (2) It performs site-specific risk assessments that examine past and present risk to residents and communities living near or on hazardous waste sites. These are used to determine if a community is at risk of adverse health effects from their exposure and whether or not an epidemiological study would be useful. (3) It reviews and evaluates risk assessments on hazardous waste incinerators that are being considered for permitting by the Toxic Substances Control Program and local air districts. (4) It provides medical and scientific consultation to the Toxics Substances Control Program, other state and local agencies, and to industries and the general public on issues dealing with hazardous waste. (5) It provides consultation to the Integrated Waste Management Board on its developing programs. (6) It addresses a number of environmental contamination issues that do not fit into traditional media categories.

The Hazardous Waste Toxicology Section interacts closely with the Environmental Epidemiology and Toxicology Branch (which will remain in the Department of Health Services), and with the Toxics Substances Control Program (which will become a new department). It interacts with the Air Board, Water Board, Waste Board, and local agencies on a variety of issues. It interacts regularly with all other HHAD programs and with the Division of Laboratories. It also interacts with the Environmental Health Division's radiologic health programs on issues related to evaluating federal Department of Energy sites in California. These interrelationships will continue under the proposed Cal-EPA.

**The Hazard Identification and Risk Assessment Branch.** This branch consists of three sections, all of which will move to the Cal-EPA. The **Reproductive and Cancer Hazard**

**Assessment Section (RCHAS)** provides technical support to the Proposition 65 Implementation Office for chemical listings and for risk assessments for regulatory purposes. RCHAS also develops criteria and guidelines for identifying chemicals as carcinogens or reproductive toxicants and for performing risk assessments. RCHAS is currently developing guidelines for identifying developmental and reproductive toxicants for DHS, and is updating the DHS carcinogen guidelines. Because RCHAS addresses chemicals rather than media, it often interacts with various programs that have concern about the chemical in a particular medium. In this regard, RCHAS' expertise is regularly sought by all HHAD components and many other DHS and state programs. These interactions will continue in the proposed Cal-EPA.

The **Air Toxicology and Epidemiology Section (ATES)** houses programs to evaluate criteria air pollutants such as ozone, oxides of nitrogen, and sulfur dioxide. Programs identifying toxic air contaminants and reviewing assessments under the "toxic hot spots" program are also housed in ATES. These activities are principally in support of ARB and local air district programs. HTES also interacts with the Air and Industrial Hygiene Laboratory on matters of indoor air pollution, and with other HHAD programs whenever problems related to air pollution need to be addressed.

The **Pesticide and Environmental Toxicology Section (PETS)** houses programs for pesticide oversight, food safety, and drinking water evaluation. PETS houses HHAD's operations in oversight of the Department of Food and Agriculture's pesticide programs. It is responsible for representing DHS on its mandated "joint and mutual responsibility" for worker health and safety with regard to pesticides. In addition, its staff serve on a number of CDFA oversight committees. PETS also provides training and guidance to local health agencies on pesticide-related issues.

PETS reviews all risk assessments performed by CDFA staff during the course of that department's regulatory activities. PETS performs risk assessments on pesticides through the establishment of tolerances on foods, as mandated by AB 2848. PETS is also responsible for evaluating, for the DHS Food and Drug Branch, the safety of pesticides in processed foods. PETS provides consultation to the Food and Drug Branch on an as-needed basis for other food problems. Other aspects of consumer product safety are also handled for the Food and Drug Branch by PETS.

Risk assessments for drinking water standards (maximum contaminant levels) are developed by PETS for the DHS Office of Drinking Water. PETS also develops "recommended public health levels" for chemicals in drinking water.

PETS also evaluates the toxicity of consumed fish and wildlife for the Department of Fish and Game and the Water Board. These evaluations lead to recommendations to Fish and Game for warnings for sportfish and for closure of commercial fishing operations. This program is expanding into providing scientific support for activities related to sediment and bay/estuary protection (primarily implemented by the Water Board), as a result of new legislation and the pending establishment of additional positions in the Governor's Budget.

This Office of Environmental Health Hazard Assessment structure, and its relation to other Cal-EPA programs, are consistent with the recommendations of the National Academy of Sciences

report, **Risk Assessment in the Federal Government: Managing the Process** (1983). The NAS Report, at 18, defines "risk assessment" as "the characterization of the potential adverse health effects of human exposures to environmental hazards." In contrast, "risk management" is defined as "the process of evaluating alternative regulatory actions and selecting among them.... The selection process necessarily requires the use of value judgments on such issues as the acceptability of risk and the reasonableness of the costs of control." *Id.*, 18-19. The components of risk assessment--hazard identification, dose-response assessment, exposure assessment, and risk characterization--must be unequivocally separated and insulated from the broader social and economic issues inherent in risk management. *Id.* at 3. The question to be considered here is, how is this separation best accomplished, and environmentally protective regulation achieved.

The NAS study reviews proposals to organizationally separate risk assessment and risk management, as well as proposals to centralize risk assessment activities in a single organization to serve all federal regulatory agencies. After examining the operation of risk assessment and risk management in several federal agencies, the Study concludes:

The Committee believes that the basic problem with risk assessment is not its administrative setting, but rather the sparseness and uncertainty of the scientific knowledge of the health hazards addressed. Reorganization of the risk assessment function will not create the data and underlying knowledge that assessors need to make risk assessments more precise.

**Id.** at 150. Finding that particular drawbacks could arise as a result of extra-agency separation, the NAS Study recommends measures other than organizational separation which could be applied to assure the distinction between risk assessment and risk management. Those measures include:

requiring written risk assessments which are publicly available, and which clearly distinguish between the scientific basis and the policy basis for an agency's conclusions; arrangements for independent, outside peer review of Agency risk assessments, with panel members chosen for scientific and technical competence. Peer review panels will provide the Agency with written evaluations of risk assessments, to be made available for public review; and adherence to uniform guidelines for risk assessment.

The proposed Cal-EPA will meet the NAS criteria. The functional and conceptual separation of risk assessment and risk management will be bolstered by the establishment of the OEHHHA as a free-standing office, separated organizationally from the other regulatory units. At the same time, the risk assessment function will be housed within Cal-EPA, thereby enabling the Agency to set timing and resource priorities as necessary to achieve its environmental protection mission. The peer review of Food and Agriculture and Toxics Program risk assessments presently performed by the environmental components of the HHAD unit of DHS, to become OEHHHA, will continue, and will meet the NAS risk assessment criteria of publicly available and independent risk assessments. In addition, to assure that the NAS criteria are implemented on a continuing basis, and to review the need for any future adjustments of Agency practice, the Office of the Secretary will include a science advisor, reporting directly to the Secretary.

**3. Transferred Functions and their Origins:** This proposal divides the existing HHAD of the Department of Health Services into two groups. The first group, recommended above as

OEHHA, comprises the environmental (distinguished from the public health) components of the existing HHAD. The remainder of HHAD, which will contain the environmental medicine and epidemiology staff, will be renamed the Environmental and Occupational Epidemiology Program, and will remain in the Department of Health Services. This program will be responsible for the evaluation of environmental disease related to chemicals in the environment, and occupational disease and injury related to workplace hazards. These programs are principally the "medical" groups of HHAD, although they do contain some toxicologic/scientific staff. Their duties will be consistent with other programs in the Department of Health Services that deal with human medicine.

In organizational terms, the Environmental and Occupational Epidemiology Program will consist of the following organizational units, remaining in the Department of Health Services:

**California Occupational Health Program.** This program provides evaluations of chemicals in the workplace to employers, employees, and the Department of Industrial Relations (DIR). It is partially supported by DIR. It also performs epidemiological investigations related to workers, under statutes that give DHS authority to enter the workplace. In these capacities, the program interacts with DIR and with HHAD's toxicologic and epidemiologic programs, as well as the DHS Division of Laboratories.

**California Birth Defects Monitoring Program.** This is a registry that collects and analyzes statewide data on adverse birth outcomes. It tabulates and studies birth defects, investigates birth defect clusters, and interacts with HHAD and other DHS programs as appropriate.

**Special Epidemiological Studies Section.** This section has two major studies underway. One, being completed, deals with contaminated drinking water in Santa Clara County. The other deals with electromagnetic fields. The section also handles other epidemiologic concerns that arise. The section interacts with other HHAD and DHS programs, as well as the Public Utilities Commission.

**Environmental Epidemiology and Toxicology Branch.** The Hazardous Waste Toxicology Section of this branch will be transferred to Cal-EPA. The remaining components perform medical and epidemiological evaluations of populations around hazardous waste sites or hazardous facilities. They also provide medical and epidemiologic support with regard to cancer clusters and poisonings related to hazardous consumer products. The branch also houses the Childhood Lead Poisoning Prevention Program for the State. In these capacities, the branch interacts with the Toxic Substances Control Program, other HHAD programs, and other DHS programs, including the Food and Drug Branch, the Division of Laboratories, the maternal and child health programs of the Family Health Division, and the Cancer Surveillance Section of the Preventive Medical Services Division.

#### Program Interactions

Any reorganization requires careful attention to ensure that prior working relationships are not disrupted, and that all necessary information and guidance can be obtained in an efficient and organized fashion. In the current instance, it appears that various formal agreements defining the

relationship of the Cal-EPA elements among themselves and with external agencies will be useful in maintaining effective working relationships.

For example, it is my intention that, following reorganization, OEHHA will enter into formal agreements to document that Cal-EPA will continue to provide service to the DHS drinking water and food and consumer product safety programs. This will assure that the good working relationships that exist today will continue in the future. I also will direct that Cal-EPA enter into formal agreements with DHS to assure close interaction of OEHHA staff with epidemiologic and medical staff in DHS to address issues of mutual concern with regard to environmental and public health. An agreement with the DHS Division of Laboratories is also appropriate.

Similarly, I will direct that Cal-EPA develop formal agreements with the Department of Food and Agriculture defining the scope and nature of program interaction.

Other steps, such as the establishment of formal committees and interagency advisory groups, may also be helpful. In these ways, those who have worked hard for so long to build an effective team to deal with environmental and public health issues can see their efforts continue to grow and prosper after the creation of the new Cal-EPA.

I recognize that formal or informal agreements, advisory groups, and the like are not organizational changes subject to the Executive Reorganization Act process. I discuss my plans for such agreements in this document in order to clarify my intent to take all steps necessary to ensure that sound working relationships are achieved.

## Conclusion

Organizational plans, no matter how extensive or well- conceived, will not in themselves protect the environment unless they are printed on highly absorbent paper, which can be used to soak spills. The key is to get to the work at hand. It is absolutely essential that an agency be created without delay, and that notions of a "perfect" structure not distract us from moving ahead now with an organization that can get to work, and begin to do some good.

This proposal is intended in that spirit. It aims to pull together areas of consensus, and to move the process forward on a rapid timeframe. The organizational model described herein should be viewed as the first step in a continuing effort. Additional areas for inclusion can be addressed subsequently in the traditional legislative process, informed not only by the views of a broad array of concerned citizens, but also by the experience of a functioning environmental protection agency.

## **APPENDIX B**

### **STATUTES**

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## Overarching Responsibility

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### Creation of the Office of Environmental Health Hazard Assessment

#### *Health and Safety Code Section 147. Division 39. Sections 59000-59017 (as cited in GRP-1)*

59000. There is, in the California Environmental Protection Agency, the **Office of Environmental Health Hazard Assessment**.

59001. As used in this division:

- (a) "Office" means the **Office of Environmental Health Hazard Assessment**.
- (b) "Director" means the Director of **Environmental Health Hazard Assessment**.

59002. The **Office of Environmental Health Hazard Assessment** is under the control of an executive Officer known as the Director of **Environmental Health Hazard Assessment**, who shall be appointed by the Governor, subject to confirmation by the Senate, and hold Office at the pleasure of the Governor. The director shall have broad-based scientific expertise as evidenced by a doctoral degree and work experience in a biological or medical science. The director shall receive the annual salary provided in Chapter 6 (commencing with Section 11550) of Part 1 of Division 3 of Title 2 of the Government Code.

59002.5. The Governor may appoint a deputy to the director. The deputy director shall hold Office at the pleasure of the director, and shall receive a salary fixed by the director with the approval of the Department of Personnel Administration.

59003. The director shall have the powers of a head of a department pursuant to Chapter 2 (commencing with Section 11150) of Part 1 of Division 3 of Title 2 of the Government Code.

59004. The **Office** succeeds to, and is vested with, all the duties, powers, purposes, responsibilities, and jurisdiction of the Health Hazard Assessment Division of the State Department of Health Services relating to assessment of human health risks of chemicals and to toxicologic and scientific consultation to programs in the State Department of Health Services and in other state agencies. The functions and responsibilities of the **Office** shall include, but not be limited to, those performed pursuant to the following provisions of law:

- (a) Article 6 (commencing with Section 32060) of Chapter 1 of Part 19 of Division 1 of Title 1 of the Education Code.
- (b) Sections 217.6 and 7715 of the Fish and Game Code.
- (c) Article 10.5 (commencing with Section 12980), Article 14 (commencing with Section 13121), and Article 15 (commencing with Section 13141) of Chapter 2 of Division 7 of, Sections 13060 and 13061 of, and Article 1.5 (commencing with Section 14021) of Chapter 3 of Division 7 of the Food and Agricultural Code.
- (d) Section 425 of, Chapter 9 (commencing with Section 2950) of Division 3 of, Sections 25416, 25886.5 and 39606 of, Article 3 (commencing with Section 39660) of Chapter 3.5 of Part 2 of Division 26 of, Sections 41982 and 42315 of, and Chapter 4 (commencing with Section 44360) of Part 6 of Division 26 of the Health and Safety Code.
- (e) Section 21151.1 of the Public Resources Code.

59005. The **Office** may use the unexpended balance of funds available for use in connection with the performance of the functions of the State Department of Health Services to which it succeeds pursuant to Section 59004.

59006. All officers and employees of the State Department of Health Services who, on the effective date of this section, are serving in the state civil service, other than as temporary employees, and engaged in the performance of a function vested in the **Office** by Section 59004 shall be transferred to the **Office**. The status, positions, and rights of those persons shall not be affected by the transfer and shall be retained by those persons as officers and employees of the **Office**, pursuant to the State Civil Service Act (Part 2 (commencing with Section 18500) of Division 5 of Title 2 of the Government Code), except as to positions exempted from civil service.

59007. The **Office** shall have possession and control of all records, papers, offices, equipment, supplies, moneys, funds, appropriations, licenses, permits, agreements, contracts, claims, judgments, land, and other property, real or personal, connected with the administration of, or held for the benefit or use of, the State Department of Health Services for the performance of functions transferred to the **Office** by Section 59004.

59008. All officers and employees of the **Office** employed after the effective date of this section shall be appointed by the director.

59009. The **Office** may commence and maintain all proper and necessary actions and proceedings for any or all of the following purposes:

- (a) To enforce its rules and regulations.
- (b) To enjoin and abate nuisances related to matters within its jurisdiction which are dangerous to health.
- (c) To compel the performance of any act specifically enjoined upon any person, officer, or board, by any law of this state relating to matters within its jurisdiction.
- (d) On matters within its jurisdiction, to protect and preserve the public health.

The **Office** may defend all actions and proceedings involving its powers and duties. In all actions and proceedings, the **Office** shall sue and be sued under the name of the **Office of Environmental Health Hazard Assessment**.

59010. The **Office** may abate public nuisances related to matters within its jurisdiction.

59011. The **Office** may advise all local health authorities, and, when in its judgment the public health is menaced by matters within its jurisdiction, the **Office** shall control and regulate their actions.

59012. The **Office** may adopt and enforce rules and regulations for the execution of its duties.

59013. Notwithstanding any other provision of law, the **Office** shall submit all of its rules and regulations on matters related to the statutory responsibilities delegated to or enforced by local health departments, except emergency rules and regulations, to the California Conference of Local Health Officers for review and comment prior to adoption. If the **Office** determines it to be appropriate to implement the proposed rules and regulations or parts thereof, contrary to the recommendations of the conference, the **Office** shall make a public finding summarizing the reasons for acting contrary to those recommendations.

59014. With the approval of the Department of Finance, and for use in furtherance of the work of the **Office**, the director may accept the following:

- (a) Grants of interest in real property.
- (b) Gifts of money from public agencies or from organizations or associations organized for scientific, educational, or charitable purposes.

59015. The **Office** shall cause special investigations of environmental sources of morbidity and mortality and the effects of localities, employments, conditions, and circumstances on the public health, and it shall perform any other duties, which may be required in procuring information for state and federal agencies regarding the effects of these conditions on the public health.

59016.

- (a) All records of interviews, written reports, and statements procured by the **Office** or by any other person, agency, or organization acting jointly with the **Office**, in connection with special morbidity and mortality studies shall be confidential insofar as the identify of the individual patient is concerned and shall be used solely for the purpose of the study. The furnishing of that information to the **Office** or its authorized representative, or to any other cooperating individual, agency, or organization in any such special study, shall not subject any person, hospital, sanitarium, rest home, nursing home, or other organization furnishing the information to any action for damages. This section shall not apply to general morbidity and mortality studies customarily and continuously conducted by the **Office** and which do not involve patient identification.
- (b) Nothing in this section prohibits the publishing by the **Office** of statistical compilations relating to morbidity and mortality studies which do not identify cases and sources of information or religious affiliations.

59017.

- (a) The **Office** may perform any of the following activities relating to assessment of human health risks of chemicals, toxicologic, or scientific consultation:
  - (1) Studies.
  - (2) Demonstrations of innovative methods.
  - (3) Evaluations of existing projects.
  - (4) Provision of training programs.
  - (5) Dissemination of information.
- (b) In performing any activity specified in subdivision (a), the **Office** may do any of the following:
  - (1) Perform the activity directly.
  - (2) Enter into contracts, cooperative agreements, or other agreements for the performance of the activity.
  - (3) Apply for and receive grants for the performance of the activity.
  - (4) Award grants for the performance of the activity.

### ***Government Code***

12812. The California Environmental Protection Agency consists of the State Air Resources Board, the **Office of Environmental Health Hazard Assessment**, the California Integrated Waste Management Board, the State Water Resources Control Board, and each California regional water quality control board, and the following departments: Pesticide Regulation and Toxic Substances Control.

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## Health Surveillance

### *Health and Safety Code*

104324.

- (a) It is the intent of the Legislature to establish an Environmental Health Surveillance System (EHSS) in accordance with this chapter. The purpose of the EHSS shall be to establish ongoing surveillance of the environmental exposures and diseases affecting Californians, with a focus on prevalence and determinants of chronic diseases. The Regents of the University of California are requested to cooperate with the division and the office in establishing the EHSS.
- (b) The objectives of the EHSS are as follows:
  - (1) To track and evaluate a variety of chronic diseases in relation to environmental exposures.
  - (2) To allow both government and university investigators and public health officials to assess the impact of environmental contaminants on the human body.
  - (3) To provide information to the relevant board, department, or office within the California Environmental Protection Agency and to the relevant branch or division within the State Department of Health Services for the development of appropriate preventive strategies.

104324.2.

- (a) On or before July 1, 2002, the Division of Environmental and Occupational Disease Control in the State Department of Health Services, in consultation with the **Office of Environmental Health Hazard Assessment**, shall create a working group of technical experts, including experts who have knowledge of the sensitivity and exposure of children, women of child-bearing age, seniors, and disparately affected populations to environmental hazards, to do all of the following:
  - (1) Develop possible approaches to establishing the EHSS, including an estimated cost for each approach.
  - (2) Prepare and submit a report to the State Department of Health Services and, the **Office of Environmental Health Hazard Assessment**, and appropriate legislative committees, by July 1, 2003, on the possible approaches to establishing the EHSS, including an estimated cost of each approach, and the recommended approach to establishing an EHSS for California.
  - (3) Develop the health and environmental measurements needed to do both of the following:
    - (A) Obtain an ongoing picture of the health of Californians.
    - (B) Establish a data base that may facilitate the examination of the relationship between chronic diseases, including birth defects, and the environment.
- (b) The Regents of the University of California are requested to cooperate with the division and the office in creating the work group described in this section.

104324.25.

- (a) On or before July 1, 2004, the State Department of Health Services, the California Environmental Protection Agency, and the University of California shall jointly develop and sign a memorandum of understanding to assess the feasibility of both of the following:
  - (1) Integrating existing environmental hazard, exposure, and health outcome data.
  - (2) Describing how these data correspond to recommendations in the final report of the expert working group established under this chapter regarding the establishment of an environmental health tracking system.
- (b) The California Environmental Health Tracking Program in the Division of Environmental and Occupational Disease Control of the department shall obtain all the following information:

- (1) A description of the relevant laws, regulations, and policies that authorize or mandate environmental hazard and disease surveillance.
- (2) A comprehensive description of California's public health surveillance and environmental hazard, exposure, and health outcome monitoring information systems, including, but not limited to, the purpose, scope, contents, and capabilities of each system.
- (3) A description of the current sources of financial support for public health surveillance, environmental hazard, exposure, and health outcome monitoring information systems, and related funds.
- (c) The California Environmental Health Tracking Program may collect any relevant information, including information related to other priority data systems identified by the working group established under this chapter, from any state agency, board, department, or office.
- (d) (1) The Legislature finds and declares that the activities requested under subdivisions (a) and (b) are within the scope of existing contracts and funding from the federal Centers for Disease Control and Prevention to the State Department of Health Services and the University of California, and are provided to support the planning and development of an environmental health tracking system in California.
- (2) Subdivisions (a) and (b) shall be implemented only to the extent that federal funds remain available for the activities specified in those subdivisions. No General Fund moneys shall be used to implement subdivisions (a) and (b).

### ***Labor Code***

50.8. The department [Industrial Relations] shall develop a long range program for upgrading and expanding the resources of the State of California in the area of occupational health and medicine. The program shall include a contractual agreement with the University of California for the creation of occupational health centers affiliated with regional schools of medicine and public health. One such occupational health center shall be situated in the northern part of the state and one in the southern part. The primary function of these occupational health centers shall be the training of occupational physicians and nurses, toxicologists, epidemiologists, and industrial hygienists. In addition, the centers shall serve as referral centers for occupational illnesses and shall engage in research on the causes, diagnosis, and prevention of occupational illnesses. The centers shall also inform the Division of Occupational Safety and Health of the Department of Industrial Relations, State Department of Health Services, the **Office of Environmental Health Hazard Assessment**, and the Department of Pesticide Regulation of their clinical and research findings.

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## General Accountability

### *Health and Safety Code*

57000. For purposes of this division, the following terms have the following meaning:

- (a) "Agency" means the California Environmental Protection Agency.
- (b) "Council" means the California Environmental Policy Council established by Section 71017 of the Public Resources Code.
- (c) "Secretary" means the Secretary for Environmental Protection.

57001.

- (a) Except as provided in subdivision (f), each **Office**, board, and department within the agency shall, on or before December 31, 1995, implement a fee accountability program for the fees specified in subdivision (d). That fee accountability program shall be designed to encourage more efficient and cost-effective operation of the programs for which the fees are assessed, and shall be designed to ensure that the amount of each fee is not more than is reasonably necessary to fund the efficient operation of the activities or programs for which the fee is assessed.
- (b) Before implementing the fee accountability program required by this section, each board, department, and **Office** within the agency shall conduct a review of the fees identified in subdivision (d) which it assesses. The purpose of this review shall be to determine what changes, if any, should be made to all of the following, in order to implement a fee system which accomplishes the purposes set forth in subdivision (a):
  - (1) The amount of the fee.
  - (2) The manner in which the fee is assessed.
  - (3) The management and workload standards of the program or activity for which the fee is assessed.
- (c) The fee accountability program of each board, department, or **Office** within the agency shall include those elements of the requirements of Section 25206 which the secretary determines are appropriate in order to accomplish the purposes set forth in subdivision (a).
- (d) This section applies to the following fees:
  - (1) The fee assessed pursuant to subdivision (d) of Section 13146 of the Food and Agricultural Code to develop data concerning the environmental fate of a pesticide when the registrant fails to provide the required information.
  - (2) The surface impoundment fees assessed pursuant to Section 25208.3.
  - (3) The fee assessed pursuant to Section 43203 to recover the costs of the State Air Resources Board in verifying manufacturer compliance on emissions from new vehicles prior to retail sale.
  - (4) The fee assessed pursuant to Section 44380 to recover the costs of the State Air Resources Board and the **Office of Environmental Health Hazard Assessment** in implementing and administering the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (Part 6 (commencing with Section 44300) of Division 26).
  - (5) The fee assessed pursuant to Section 43212 of the Public Resources Code to recover the costs of the California Integrated Waste Management Board when it assumes the responsibilities of the local enforcement agency.
  - (6) The fee assessed pursuant to Section 43508 of the Public Resources Code to recover the costs of the California Integrated Waste Management Board in reviewing closure plans.

- (7) The water rights permit fees assessed pursuant to Chapter 8 (commencing with Section 1525) of Part 2 of Division 2 of the Water Code.
- (8) The fee assessed pursuant to subdivision (c) of Section 13260 of the Water Code for waste discharge requirements, including, but not limited to, requirements for storm water discharges, and the fee assessed pursuant to subdivision (i) of Section 12360 of the Water Code for National Pollution Discharge Elimination System permits.
- (9) The costs assessed pursuant to Section 13304 of the Water Code to recover the costs of the State Water Resources Control Board or the California regional water quality control boards in implementing and enforcing cleanup and abatement orders.
- (e) If a board, department, or **Office** within the agency determines that the amount of a fee that is fixed in statute should be increased in order to implement a fee accountability system which accomplishes the purposes of subdivision (a), it shall notify the Legislature, and make recommendations concerning appropriate increases in the statutorily fixed fee amount. For fees whose amount is not fixed in statute, the board, department, or **Office** may increase the fee only if it makes written findings in the record that it has implemented a fee accountability program which complies with this section.
- (f) The Department of Toxic Substances Control shall be deemed to be in compliance with this section if it complies with Section 25206.

57002. The agency shall conduct a study by surveying state, regional, and local agencies charged with implementing air quality, water quality, toxics, solid waste, and hazardous waste laws and regulations to determine how much revenue is derived from fines and penalties and to what purposes that revenue is directed. The study should include a review of the extent to which those funds are used to support state, regional, and local agency operations.

57005.

- (a) Commencing January 1, 1994, each board, department, and **Office** within the agency, before adopting any major regulation, shall evaluate the alternatives to the requirements of the proposed regulation that are submitted to the board, department, or **Office** pursuant to paragraph (7) of subdivision (a) of Section 11346.5 of the Government Code and consider whether there is a less costly alternative or combination of alternatives which would be equally as effective in achieving increments of environmental protection in a manner that ensures full compliance with statutory mandates within the same amount of time as the proposed regulatory requirements.
- (b) For purposes of this section, "major regulation" means any regulation that will have an economic impact on the state's business enterprises in an amount exceeding ten million dollars (\$10,000,000), as estimated by the board, department, or **Office** within the agency proposing to adopt the regulation in the assessment required by subdivision (a) of Section 11346.3 of the Government Code.
- (c) On or before December 31, 1994, after consulting with the Secretary of Trade and Commerce, the director or executive officer of each board, department, and **Office** within the agency, and after receiving public comment, the secretary shall adopt guidelines to be followed by the boards, departments, and offices within the agency concerning the methods and procedures to be used in conducting the evaluation required by this section.

57007.

- (a) The agency, and the offices, boards, and departments within the agency, shall institute quality government programs to achieve increased levels of environmental protection and the public's satisfaction through improving the quality, efficiency, and cost-effectiveness of the state programs that implement and enforce state and federal environmental protection statutes. These programs shall be designed to increase the level of environmental protection while expediting decisionmaking and producing cost savings. The secretary shall create an advisory group



comprised of state and local government, business, environmental, and consumer representatives experienced in quality management to provide guidance in that effort. The secretary shall develop a model quality management program that local agencies charged with implementing air quality, water quality, toxics, solid waste, and hazardous waste laws and regulations may use at their discretion.

- (b) The agency, and each board, department, and **Office** within the agency, shall submit a yearly report to the Governor and Legislature, no later than December 1 with respect to the previous fiscal year, reporting on the extent to which these state agencies have attained their performance objectives, and on their continuous quality improvement efforts.
- (c) Nothing in this section abrogates any collective bargaining agreement or interferes with any established employee rights.
- (d) For purposes of this section, "quality government program" means all of the following:
  - (1) A process for obtaining the views of employees, the regulated community, the public, environmental organizations, and governmental officials with regard to the performance, vision, and needs of the agency implementing the quality government program.
  - (2) A process for developing measurable performance objectiveness using the views of the persons and organizations specified in paragraph (1).
  - (3) Processes for continually improving quality and for training agency personnel, using the information obtained from implementing paragraphs (1) and (2).

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## External Review Requirements

### *Health and Safety Code*

57003.

- (a) Before a board, department or **Office** within the agency adopts chemical risk assessment guidelines or policies for evaluating the toxicity of chemicals or prepares a health evaluation of a chemical that will be used in the regulatory process of another board, department, or **Office**, the board, department, or **Office** shall first convene a public workshop at which the guidelines, policies, or health evaluation may be discussed. The public workshop shall be designed to encourage a constructive dialogue between the scientists employed by the board, department, or **Office** that prepared the proposed guidelines or policies or health evaluation and scientists not employed by that board, department, or **Office** and to evaluate the degree to which the proposed guidelines or policies or health evaluation are based on sound scientific methods, knowledge, and practice. Following the workshop, the agency shall revise the guidelines, policies, or health evaluation, as appropriate, and circulate it for public comment for a period of at least 30 days.
- (b) In any case where the guidelines, policies, or health evaluations described in subdivision (a) are proposed, or are being prepared, pursuant to a statutory requirement that specifies a procedure or a time period for carrying out the requirement, the requirements of subdivision (a) do not authorize a delay or a postponement in carrying out the statutory requirement.

57004.

- (a) For purposes of this section, the following terms have the following meanings:
  - (1) "Rule" means either of the following:
    - (A) A regulation, as defined in Section 11342.600 of the Government Code.
    - (B) A policy adopted by the State Water Resources Control Board pursuant to the Porter-Cologne Water Quality Control Act (Division 7 (commencing with Section 13000) of the Water Code) that has the effect of a regulation and that is adopted in order to implement or make effective a statute.
  - (2) "Scientific basis" and "scientific portions" mean those foundations of a rule that are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment.
- (b) The agency, or a board, department, or **Office** within the agency, shall enter into an agreement with the National Academy of Sciences, the University of California, the California State University, or any similar scientific institution of higher learning, any combination of those entities, or with a scientist or group of scientists of comparable stature and qualifications that is recommended by the President of the University of California, to conduct an external scientific peer review of the scientific basis for any rule proposed for adoption by any board, department, or **Office** within the agency. The scientific basis or scientific portion of a rule adopted pursuant to Chapter 6.6 (commencing with Section 25249.5) of Division 20 or Chapter 3.5 (commencing with Section 39650) of Division 26 shall be deemed to have complied with this section if it complies with the peer review processes established pursuant to these statutes.
- (c) No person may serve as an external scientific peer reviewer for the scientific portion of a rule if that person participated in the development of the scientific basis or scientific portion of the rule.
- (d) No board, department, or **Office** within the agency shall take any action to adopt the final version of a rule unless all of the following conditions are met:

- (1) The board, department, or **Office** submits the scientific portions of the proposed rule, along with a statement of the scientific findings, conclusions, and assumptions on which the scientific portions of the proposed rule are based and the supporting scientific data, studies, and other appropriate materials, to the external scientific peer review entity for its evaluation.
- (2) The external scientific peer review entity, within the timeframe agreed upon by the board, department, or **Office** and the external scientific peer review entity, prepares a written report that contains an evaluation of the scientific basis of the proposed rule. If the external scientific peer review entity finds that the board, department, or **Office** has failed to demonstrate that the scientific portion of the proposed rule is based upon sound scientific knowledge, methods, and practices, the report shall state that finding, and the reasons explaining the finding, within the agreed-upon timeframe. The board, department, or **Office** may accept the finding of the external scientific peer review entity, in whole, or in part, and may revise the scientific portions of the proposed rule accordingly. If the board, department, or **Office** disagrees with any aspect of the finding of the external scientific peer review entity, it shall explain, and include as part of the rulemaking record, its basis for arriving at such a determination in the adoption of the final rule, including the reasons why it has determined that the scientific portions of the proposed rule are based on sound scientific knowledge, methods, and practices.
- (e) The requirements of this section do not apply to any emergency regulation adopted pursuant to subdivision (b) of Section 11346.1 of the Government Code.
- (f) Nothing in this section shall be interpreted to, in any way, limit the authority of a board, department, or **Office** within the agency to adopt a rule pursuant to the requirements of the statute that authorizes or requires the adoption of the rule.

#### ***Government Code***

11342.600. "Regulation" means every rule, regulation, order, or standard of general application or the amendment, supplement, or revision of any rule, regulation, order, or standard adopted by any state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure.

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## Public Records

### *Government Code*

[Note: there are 20+ pages of text associated with this Act. Refer to the complete code, starting with Section 6250, for details.]

6250. In enacting this chapter, the Legislature, mindful of the right of individuals to privacy, finds and declares that access to information concerning the conduct of the people's business is a fundamental and necessary right of every person in this state.

6251. This chapter shall be known and may be cited as the California Public Records Act.

6252. As used in this chapter:

- (a) "State agency" means every state office, officer, department, division, bureau, board, and commission or other state body or agency, except those agencies provided for in Article IV (except Section 20 thereof) or Article VI of the California Constitution.
- (b) "Local agency" includes a county; city, whether general law or chartered; city and county; school district; municipal corporation; district; political subdivision; or any board, commission or agency thereof; other local public agency; or entities that are legislative bodies of a local agency pursuant to subdivisions (c) and (d) of Section 54952.
- (c) "Person" includes any natural person, corporation, partnership, limited liability company, firm, or association.
- (d) "Public agency" means any state or local agency.
- (e) "Public records" includes any writing containing information relating to the conduct of the public's business prepared, owned, used, or retained by any state or local agency regardless of physical form or characteristics. "Public records" in the custody of, or maintained by, the Governor's office means any writing prepared on or after January 6, 1975.
- (f) "Writing" means any handwriting, typewriting, printing, photostating, photographing, photocopying, transmitting by electronic mail or facsimile, and every other means of recording upon any tangible thing any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof, and any record thereby created, regardless of the manner in which the record has been stored.
- (g) "Member of the public" means any person, except a member, agent, officer, or employee of a federal, state, or local agency acting within the scope of his or her membership, agency, office, or employment.

6253.

- (a) Public records are open to inspection at all times during the office hours of the state or local agency and every person has a right to inspect any public record, except as hereafter provided. Any reasonably segregable portion of a record shall be available for inspection by any person requesting the record after deletion of the portions that are exempted by law.
- (b) Except with respect to public records exempt from disclosure by express provisions of law, each state or local agency, upon a request for a copy of records that reasonably describes an identifiable record or records, shall make the records promptly available to any person upon payment of fees covering direct costs of duplication, or a statutory fee if applicable. Upon request, an exact copy shall be provided unless impracticable to do so.

- (c) Each agency, upon a request for a copy of records, shall, within 10 days from receipt of the request, determine whether the request, in whole or in part, seeks copies of disclosable public records in the possession of the agency and shall promptly notify the person making the request of the determination and the reasons therefor. In unusual circumstances, the time limit prescribed in this section may be extended by written notice by the head of the agency or his or her designee to the person making the request, setting forth the reasons for the extension and the date on which a determination is expected to be dispatched. No notice shall specify a date that would result in an extension for more than 14 days. When the agency dispatches the determination, and if the agency determines that the request seeks disclosable public records, the agency shall state the estimated date and time when the records will be made available. As used in this section, "unusual circumstances" means the following, but only to the extent reasonably necessary to the proper processing of the particular request:
  - (1) The need to search for and collect the requested records from field facilities or other establishments that are separate from the office processing the request.
  - (2) The need to search for, collect, and appropriately examine a voluminous amount of separate and distinct records that are demanded in a single request.
  - (3) The need for consultation, which shall be conducted with all practicable speed, with another agency having substantial interest in the determination of the request or among two or more components of the agency having substantial subject matter interest therein.
  - (4) The need to compile data, to write programming language or a computer program, or to construct a computer report to extract data.
- (d) Nothing in this chapter shall be construed to permit an agency to delay or obstruct the inspection or copying of public records. The notification of denial of any request for records required by Section 6255 shall set forth the names and titles or positions of each person responsible for the denial.
- (e) Except as otherwise prohibited by law, a state or local agency may adopt requirements for itself that allow for faster, more efficient, or greater access to records than prescribed by the minimum standards set forth in this chapter.

6253.1.

- (a) When a member of the public requests to inspect a public record or obtain a copy of a public record, the public agency, in order to assist the member of the public make a focused and effective request that reasonably describes an identifiable record or records, shall do all of the following, to the extent reasonable under the circumstances:
  - (1) Assist the member of the public to identify records and information that are responsive to the request or to the purpose of the request, if stated.
  - (2) Describe the information technology and physical location in which the records exist.
  - (3) Provide suggestions for overcoming any practical basis for denying access to the records or information sought.
- (b) The requirements of paragraph (1) of subdivision (a) shall be deemed to have been satisfied if the public agency is unable to identify the requested information after making a reasonable effort to elicit additional clarifying information from the requester that will help identify the record or records.
- (c) The requirements of subdivision (a) are in addition to any action required of a public agency by Section 6253.
- (d) This section shall not apply to a request for public records if any of the following applies:
  - (1) The public agency makes available the requested records pursuant to Section 6253.
  - (2) The public agency determines that the request should be denied and bases that determination solely on an exemption listed in Section 6254.
  - (3) The public agency makes available an index of its records.

6253.4.

- (a) Every agency may adopt regulations stating the procedures to be followed when making its records available in accordance with this section. The following state and local bodies shall establish written guidelines for accessibility of records. A copy of these guidelines shall be posted in a conspicuous public place at the offices of these bodies, and a copy of the guidelines shall be available upon request free of charge to any person requesting that body's records:

Department of Motor Vehicles  
Department of Consumer Affairs  
Department of Transportation  
Department of Real Estate  
Department of Corrections  
Department of the Youth Authority  
Department of Justice  
Department of Insurance  
Department of Corporations  
Department of Managed Health Care  
Secretary of State  
State Air Resources Board  
Department of Water Resources  
Department of Parks and Recreation  
San Francisco Bay Conservation and Development Commission  
State Board of Equalization  
State Department of Health Services  
Employment Development Department  
State Department of Social Services  
State Department of Mental Health  
State Department of Developmental Services  
State Department of Alcohol and Drug Abuse  
Office of Statewide Health Planning and Development  
Public Employees' Retirement System  
Teachers' Retirement Board  
Department of Industrial Relations  
Department of General Services  
Department of Veterans Affairs  
Public Utilities Commission  
California Coastal Commission  
State Water Resources Control Board  
San Francisco Bay Area Rapid Transit District  
All regional water quality control boards  
Los Angeles County Air Pollution Control District  
Bay Area Air Pollution Control District  
Golden Gate Bridge, Highway and Transportation District  
Department of Toxic Substances Control

**Office of Environmental Health Hazard Assessment**

- (b) Guidelines and regulations adopted pursuant to this section shall be consistent with all other sections of this chapter and shall reflect the intention of the Legislature to make the records accessible to the public. The guidelines and regulations adopted pursuant to this section shall not operate to limit the hours public records are open for inspection as prescribed in Section 6253.

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## Children's Health

### Health and Safety Code

[Note: the following language reflects both general authority for OEHHA as well as specific responsibilities in assessing air quality. Rather than duplicating this section under air quality, take note of the specific air-quality related responsibilities when reviewing the statutes.]

900. There is hereby created the Children's Environmental Health Center within the Environmental Protection Agency. The primary purposes of the center shall include all of the following:

- (a) To serve as the chief advisor to the Secretary for Environmental Protection and to the Governor on matters within the jurisdiction of the Environmental Protection Agency relating to environmental health and environmental protection as each of those matters relates to children.
- (b) To assist the boards, departments, and offices within the Environmental Protection Agency to assess the effectiveness of statutes, regulations, and programs designed to protect children from environmental hazards.
- (c) To coordinate within the Environmental Protection Agency and with other state agencies, regulatory efforts, research and data collection, and other programs and services that impact the environmental health of children, and coordinate with appropriate federal agencies conducting related regulatory efforts and research and data collection.
- (d) In consultation with the State Air Resources Board and the **Office of Environmental Health Hazard Assessment**, and notwithstanding Section 7550.5 of the Government Code, to report to the Legislature and the Governor no later than December 31, 2001, on the progress of the state board and the **Office** toward implementing the act that added this part during the 1999-2000 Regular Session and to make recommendations for any statutory or regulatory changes that may be necessary to carry out the intent of that act to protect the public health, including infants and children, from air pollutants and toxic air contaminants.

901.

- (a) As used in this section:
  - (1) "Center" means the Children's Environmental Health Center established pursuant to Section 900.
  - (2) "**Office**" means the **Office of Environmental Health Hazard Assessment**.
- (b) On or before June 30, 2001, the **Office** shall review cancer risk assessment guidelines for use by the **Office** and the other entities within the California Environmental Protection Agency to establish cancer potency values or numerical health guidance values that adequately address carcinogenic exposures to the fetus, infants, and children.
- (c) The review required by subdivision (b) shall include a review of existing state and federal cancer risk guidelines, as well as new information on carcinogenesis, and shall consider the extent to which those guidelines address risks from exposures occurring early in life.
- (d) The review required by subdivision (b) shall also include, but not be limited to, all of the following:
  - (1) The development of criteria for identifying carcinogens likely to have a greater impact if exposures occur early in life.
  - (2) The assessment of methodologies used in existing guidelines to address early-in-life exposures.
  - (3) The construction of a data base of animal studies to evaluate increases in risks from short-term early-in-life exposures.

- (e) On or before June 30, 2004, the **Office** shall finalize and publish children's cancer guidelines that shall be protective of children's health. These guidelines shall be revised and updated as needed by the **Office**.
- (f) (1) On or before December 31, 2002, the **Office** shall publish a guidance document, for use by the Department of Toxic Substances Control and other state and local environmental and public health agencies, to assess exposures and health risks at existing and proposed schoolsites. The guidance document shall include, but not be limited to, all of the following:
  - (A) Appropriate child-specific routes of exposure unique to the school environment, in addition to those in existing exposure assessment models.
  - (B) Appropriate available child-specific numerical health effects guidance values, and plans for the development of additional child-specific numerical health effects guidance values.
  - (C) The identification of uncertainties in the risk assessment guidance, and those actions that should be taken to address those uncertainties.
- (2) The **Office** shall consult with the Department of Toxic Substances Control and the State Department of Education in the preparation of the guidance document required by paragraph (1) in order to ensure that it provides the information necessary for these two agencies to meet the requirements of Sections 17210.1 and 17213.1 of the Education Code.
- (g) On or before January 1, 2002, the **Office**, in consultation with the appropriate entities within the California Environmental Protection Agency, shall identify those chemical contaminants commonly found at schoolsites and determined by the **Office** to be of greatest concern based on criteria that identify child-specific exposures and child-specific physiological sensitivities. On or before December 31, 2002, and annually thereafter, the **Office** shall publish and make available to the public and to other state and local environmental and public health agencies and school districts, numerical health guidance values for five of those chemical contaminants identified pursuant to this subdivision until the contaminants identified have been exhausted.
- (h) On and after January 1, 2002, and biannually thereafter, the center shall report to the Legislature and the Governor on the implementation of this section as part of the report required by subdivision (d) of Section 900. The report shall include, but not be limited to, information on revisions or modifications made by the **Office** and other entities within the California Environmental Protection Agency to cancer potency values and other numerical health guidance values in order to be protective of children's health. The report shall also describe the use of the revised health guidance values in the programs and activities of the **Office** and the other boards and departments within the California Environmental Protection Agency.
- (i) Nothing in this section relieves any entity within the California Environmental Protection Agency of complying with Chapter 3.5 (commencing with Section 11340) of Part 2 of Division 3 Title 2 of the Government Code, to the extent that chapter is applicable to the entity on or before July 19, 2000, or the effective date of Section 57004.



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## Environmental Indicators

### *Public Resources Code*

71080. The Legislature finds and declares the following:

- (a) Traditionally, many of California's environmental programs have assessed their performance using measures of activity, including, for example, the number of permits granted or regulatory standards adopted. Addressing the complex environmental challenges of the 21st century will require new approaches that rely on better information from objective and scientifically based environmental indicators. Over the years, substantial efforts have been devoted toward this end, yet historically there have been very few meaningful, objective measures with which to determine the environmental impacts of these efforts.
- (b) The California Environmental Protection Agency has made a commitment to move away from measures of activity, and instead focus on measurable environmental results to judge program performance. To support this commitment, the California Environmental Protection Agency established the Environmental Protection Indicators for California (EPIC) Project in 2000, and charged EPIC with developing and maintaining a comprehensive set of environmental indicators, which are scientific measurements of environmental conditions and trends. To ensure that the development of indicators was based on sound science, the California Environmental Protection Agency designated its **Office of Environmental Health Hazard Assessment** to lead the effort. The California Environmental Protection Agency, working in partnership with the Resources Agency and in cooperation with the Department of Health Services, released a report containing the initial set of 84 environmental indicators in April 2002.
- (c) Objective and scientifically based environmental indicators improve our understanding of the environment and how human activities and other factors can influence it. The indicators establish a scientific basis for evaluating the effectiveness of environmental programs and identifying the need for specific actions to improve environmental conditions throughout the state and the disproportionate impact on low-income communities and communities of color. Decisions to create, modify, or eliminate California Environmental Protection Agency policies and programs need to be driven by information reflected by environmental indicators; and, to the extent feasible, budget decisions should include a reference as to how the proposed change is intended to impact a relevant environmental indicator.
- (d) To ensure the credibility of objective and scientifically based environmental indicators, a qualified scientific body with expertise in environmental and public health protection should provide input into the selection and development of the indicators.
- (e) To ensure the relevance of the environmental indicators, input should be sought from a broad range of stakeholders.
- (f) It is the intent of the Legislature that the Secretary for Environmental Protection, the Secretary of the Resources Agency, and the Director of the Department of Health Services in conjunction with the boards, departments, and offices in their respective agencies, use environmental indicators, where applicable, in the development of the budget proposals for the 2005-06 fiscal year and each fiscal year thereafter.

71081.

- (a) Beginning on July 1, 2004, to the extent that funds are appropriated by the Legislature for this purpose, the **Office**, on behalf of the office of the secretary, shall develop and maintain a system of environmental indicators. The **Office** shall develop and maintain the system to meet all of the following objectives for using environmental indicators:

- (1) Provide policymakers and the public with an improved understanding of the condition of the state's environment and the effects of the release of contaminants on public health and the environment.
  - (2) Provide policymakers and the public with information to evaluate the effectiveness of the agency's programs in improving environmental quality and protecting public health throughout the state, including environmental quality and public health in low-income communities and communities of color.
  - (3) Assist in the development and modification of agency programs, plans, and policies as environmental conditions change over time.
  - (4) Assist the agency in making budget decisions that address the most significant environmental concerns.
- (b) The following definitions apply to this section:
- (1) "Agency" means the California Environmental Protection Agency.
  - (2) "Environmental indicator" means an objective and scientifically based measure that represents information on environmental conditions, releases of contaminants into the environment, or the effects of those releases.
  - (3) "**Office**" means the **Office of Environmental Health Hazard Assessment**.
  - (4) "Secretary" means the Secretary for Environmental Protection.
- (c) The secretary shall submit a report on the environmental indicators developed pursuant to this chapter to the Governor and the Legislature on or before January 1, 2006, and by January 1 every two years thereafter. The report shall include a discussion as to the manner in which the environmental indicators are being used by the agency to meet the objectives set forth in subdivision (a). The **Office** shall make the report available to the public on its Web site. The **Office** shall include on its Web site any additional relevant information in support of those environmental indicators and shall update that information posted on the Web site as new information becomes available.
- (d) The **Office** shall be the lead agency for developing new environmental indicators, for modifying, deleting, and updating existing environmental indicators, and for developing and maintaining an environmental indicator database. The **Office** shall lead an intra-agency workgroup, consisting of representatives from each of the boards, departments, and offices within the agency. The **Office** shall consult with the intra-agency workgroup in developing and maintaining the environmental indicators, program planning, policy formulation, and other decisionmaking processes, and in drafting the report required under subdivision (c).
- (e) In developing and maintaining the environmental indicators, the **Office** shall consult with the Resources Agency, the State Department of Health Services, and other state agencies as appropriate.
- (f) The **Office** may utilize information for indicators that is not collected by other boards and departments within the agency and may identify and establish new indicators.
- (h) In implementing this section, the **Office** may hold public meetings to receive comments from a broad range of stakeholders, including, but not limited to, local government, the regulated community, nongovernmental organizations, and other groups with an interest in environmental issues.
- (i) The **Office** shall consult with the scientific review panel established pursuant to Section 50.8 of the Labor Code for the purpose of establishing, updating, and evaluating environmental indicators.
- (j) The secretary shall periodically assess the ability of the environmental indicators system to meet each of the objectives cited in subdivision (a) and the ability of the system to support the development and implementation of the agencywide environmental justice strategy pursuant to Section 71113.

71082.

- (a) As appropriate, a budget change proposal submitted to the Legislature by a board, department, or **Office** within the California Environmental Protection Agency or the Resources Agency shall describe how the proposal would affect any applicable "Type I" environmental indicator. To the extent that a budget change proposal relates to a "Type II" or "Type III" environmental indicator, the budget change proposal shall reference what data collection and further analysis is needed before the environmental status or trend that is the subject of the indicator may be presented.
- (b) A board, department, or **Office** within the California Environmental Protection Agency shall explain how its bond programs relate to or affect environmental indicators.

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## Environmental Justice

### *Public Resources Code*

71100. The following definitions govern the construction of this part:

- (a) "Cal BECC" means the California Border Environmental Cooperation Committee established on July 22, 1994, by the Governors of California, Baja California, and Baja California Sur.
- (b) "California-Baja California border region" means the region described in Chapter IV of the US-Mexico Border XXI Program, Framework Document, published October 1996.
- (c) "Fund" means the California Border Environmental Education Fund established pursuant to Section 71101.

71101.

- (a) The California Border Environmental and Public Health Protection Fund is hereby established in the State Treasury to receive funds appropriated in the annual Budget Act, and other sources, such as from North American Development Bank, Border Environment Cooperation Committee, United States Environmental Protection Agency, and private businesses or foundations, and any interest accrued on those funds.
- (b) The money in the fund shall be available, upon appropriation, to the Secretary of Environmental Protection, for allocation for expenditure for the purposes of this part.
- (c) The money in the fund shall not be made available for the purpose of bringing a person or a facility into compliance with environmental laws, or to provide funds to remediate environmental damage. The fund, instead, shall assist appropriate responsible agencies in California and Baja California in the implementation of projects to identify and resolve environmental and public health problems that directly threaten the health or environmental quality of California residents or sensitive natural resources of the California border region, including projects related to domestic and industrial wastewater, vehicle and industrial air emissions, hazardous waste transport and disposal, human and ecological risk, and disposal of municipal solid waste.

71102. The money in the fund shall be used for the following purposes:

- (a) To assist local governments in implementation of projects to identify and resolve environmental and public health problems that directly threaten the health or environmental quality of California residents or sensitive natural resources of the California border region, including projects related to domestic and industrial wastewater, vehicle and industrial air emissions, hazardous waste transport and disposal, human and ecological risks, and disposal of municipal solid waste.
- (b) To provide technical assistance to those persons and entities described in subdivision (a) with regard to environmental protection, public health protection, or natural resource protection.
- (c) To provide limited funds for equipment and labor costs associated with emergency abatement of environmental and public health problems imposed on residents of California due to cross-border impacts of pollutants originating from Baja California.
- (d) To provide analytical and scientific equipment and services needed by border area public agencies to identify and monitor the sources of environmental and public health threats posed by cross-border transmission of environmental pollutants and toxics.

71103.

- (a) The Secretary for Environmental Protection, upon request, shall inform any community-based nonprofit environmental organization, responsible local government, and special district located

within the California-Baja California border region that it may request funding pursuant to Section 71102.

- (b) The Secretary for Environmental Protection, in consultation with Cal BECC, shall award grants to a local governmental entity or special district, community-based nonprofit environmental organization, or postsecondary educational institution based on the severity of the environmental, public health, or natural resource concerns due to cross-border transmission of environmental pollutants or toxics to the city or county in which the entity, organization, or institution is located. First priority for funding shall be given to an entity, organization, or institution located in a city or county in which an environmental, public health, or natural resource threat exists and that has existing capability to respond to, implement, and abate the threat to California from cross-border sources.
- (c) The Secretary for Environmental Protection, on behalf of Cal BECC, shall accept donations of used equipment, including computers, printers, and lab equipment, for distribution to governmental entities and community-based nonprofit environmental organizations located within the California-Baja California border region and postsecondary educational institutions located within Baja California and within the California-Baja California border region, if the donations can be shown to contribute to the protection of the environment, public health, or natural resources of the California border region.

71104. This part shall only be operative during those fiscal years for which funds are appropriated in the annual Budget Act to implement this part, or are made available from contributions or donations from the sources identified in Section 71101. The Secretary for Environmental Protection shall inform the Secretary of State when funds are made available from contributions or donations from the sources identified in Section 71101.

71110. The California Environmental Protection Agency, in designing its mission for programs, policies, and standards, shall do all of the following:

- (a) Conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state.
- (b) Promote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations in the state.
- (c) Ensure greater public participation in the agency's development, adoption, and implementation of environmental regulations and policies.
- (d) Improve research and data collection for programs within the agency relating to the health of, and environment of, people of all races, cultures, and income levels, including minority populations and low-income populations of the state.
- (e) Coordinate its efforts and share information with the United States Environmental Protection Agency.
- (f) Identify differential patterns of consumption of natural resources among people of different socioeconomic classifications for programs within the agency.
- (g) Consult with and review any information received from the Working Group on Environmental Justice established to assist the California Environmental Protection Agency in developing an agencywide strategy pursuant to Section 71113 that meets the requirements of this section.

71111. On or before January 1, 2001, the California Environmental Protection Agency shall develop a model environmental justice mission statement for boards, departments, and **Office** within the agency. For purposes of this section, environmental justice has the same meaning as defined in subdivision (e) of Section 65040.12 of the Government Code.

71112. In developing the model environmental justice mission statement pursuant to Section 71111, the California Environmental Protection Agency shall consult with, review, and evaluate any information received from the Working Group on Environmental Justice established pursuant to Section 71113.

71113.

- (a) On or before January 1, 2002, the Secretary for Environmental Protection shall convene a Working Group on Environmental Justice to assist the California Environmental Protection Agency in developing, on or before July 1, 2002, an agencywide strategy for identifying and addressing any gaps in existing programs, policies, or activities that may impede the achievement of environmental justice.
- (b) The working group shall be composed of the Secretary for Environmental Protection, the Chairs of the State Air Resources Board, the California Integrated Waste Management Board, and the State Water Resources Control Board, the Director of Toxic Substances Control, the Director of Pesticide Regulation, the Director of **Environmental Health Hazard Assessment**, and the Director of Planning and Research.
- (c) The working group shall do all of the following on or before April 1, 2002:
  - (1) Examine existing data and studies on environmental justice, and consult with state, federal, and local agencies and affected communities.
  - (2) Recommend criteria to the Secretary for Environmental Protection for identifying and addressing any gaps in existing programs, policies, or activities that may impede the achievement of environmental justice.
  - (3) Recommend procedures and provide guidance to the California Environmental Protection Agency for the coordination and implementation of intraagency environmental justice strategies.
  - (4) Recommend procedures for collecting, maintaining, analyzing, and coordinating information relating to an environmental justice strategy.
  - (5) Recommend procedures to ensure that public documents, notices, and public hearings relating to human health or the environment are concise, understandable, and readily accessible to the public. The recommendation shall include guidance for determining when it is appropriate for the California Environmental Protection Agency to translate crucial public documents, notices, and hearings relating to human health or the environment for limited-English-speaking populations.
  - (6) Hold public meetings to receive and respond to public comments regarding recommendations required pursuant to this section, prior to the finalization of the recommendations. The California Environmental Protection Agency shall provide public notice of the availability of draft recommendations at least one month prior to the public meetings.
  - (7) Make recommendations on other matters needed to assist the agency in developing an intraagency environmental justice strategy.

71114.1. After the California Environmental Protection Agency develops the strategy pursuant to Section 71113 and before December 31, 2003, each board, department, and **Office** within the agency shall, in coordination with the Secretary for Environmental Protection and the Director of the Office of Planning and Research, review its programs, policies, and activities and identify and address any gaps in its existing programs, policies, or activities that may impede the achievement of environmental justice.

71115. The Secretary for Environmental Protection shall, not later than January 1, 2004, and every three years thereafter, prepare and submit to the Governor and the Legislature a report on the implementation of this part.

## ***Government Code***

65040.12.

- (a) The [Governor's] office [of Planning and Research] shall be the coordinating agency in state government for environmental justice programs.
- (b) The director shall do all of the following:
  - (1) Consult with the Secretaries of the California Environmental Protection Agency, the Resources Agency, the Trade and Commerce Agency, and the Business, Transportation and Housing Agency, the Working Group on Environmental Justice established pursuant to Section 72002 of the Public Resources Code, any other appropriate state agencies, and all other interested members of the public and private sectors in this state.
  - (2) Coordinate the office's efforts and share information regarding environmental justice programs with the Council on Environmental Quality, the United States Environmental Protection Agency, the General Accounting Office, the Office of Management and Budget, and other federal agencies.
  - (3) Review and evaluate any information from federal agencies that is obtained as a result of their respective regulatory activities under federal Executive Order 12898, and from the Working Group on Environmental Justice established pursuant to Section 72002 of the Public Resources Code.
- (c) When it adopts its next edition of the general plan guidelines pursuant to Section 65040.2, but in no case later than July 1, 2003, the office shall include guidelines for addressing environmental justice matters in city and county general plans. The office shall hold at least one public hearing prior to the release of any draft guidelines, and at least one public hearing after the release of the draft guidelines. The hearings may be held at the regular meetings of the Planning Advisory and Assistance Council.
- (d) The guidelines developed by the office pursuant to subdivision (c) shall recommend provisions for general plans to do all of the following:
  - (1) Propose methods for planning for the equitable distribution of new public facilities and services that increase and enhance community quality of life throughout the community, given the fiscal and legal constraints that restrict the siting of these facilities.
  - (2) Propose methods for providing for the location, if any, of industrial facilities and uses that, even with the best available technology, will contain or produce material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health and safety, in a manner that seeks to avoid over-concentrating these uses in proximity to schools or residential dwellings.
  - (3) Propose methods for providing for the location of new schools and residential dwellings in a manner that seeks to avoid locating these uses in proximity to industrial facilities and uses that will contain or produce material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health and safety.
  - (4) Propose methods for promoting more livable communities by expanding opportunities for transit-oriented development so that residents minimize traffic and pollution impacts from traveling for purposes of work, shopping, schools, and recreation.
- (e) For the purposes of this section, "environmental justice" means the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

## Air Quality

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### Criteria Air Pollutants and Toxic Air Contaminants: Non-pesticides

#### *Health and Safety Code*

425. The **Office of Environmental Health Hazard Assessment** shall submit to the State Air Resources Board recommendations for ambient air quality standards reflecting the relationship between the intensity and composition of air pollution and the health, illness, irritation to the senses, and the death of human beings.

39606.

- (a) The state board shall do both of the following:
  - (1) Based upon similar meteorological and geographic conditions and consideration for political boundary lines whenever practicable, divide the state into air basins to fulfill the purposes of this division.
  - (2) Adopt standards of ambient air quality for each air basin in consideration of the public health, safety, and welfare, including, but not limited to, health, illness, irritation to the senses, aesthetic value, interference with visibility, and effects on the economy. These standards may vary from one air basin to another. Standards relating to health effects shall be based upon the recommendations of the **Office of Environmental Health Hazard Assessment**.
- (b) In its recommendations for submission to the state board pursuant to paragraph (2) of subdivision (a), the **Office of Environmental Health Hazard Assessment**, to the extent that information is available, shall assess the following:
  - (1) Exposure patterns, including, but not limited to, patterns determined by relevant data supplied by the state board, among infants and children that are likely to result in disproportionately high exposure to ambient air pollutants in comparison to the general population.
  - (2) Special susceptibility of infants and children to ambient air pollutants in comparison to the general population.
  - (3) The effects on infants and children of exposure to ambient air pollutants and other substances that have a common mechanism of toxicity.
  - (4) The interaction of multiple air pollutants on infants and children, including the interaction between criteria air pollutants and toxic air contaminants.
- (c) In assessing the factors specified in subdivision (b), the **Office** shall use current principles, practices, and methods used by public health professionals who are experienced practitioners in the field of human health effects assessment. The scientific basis or scientific portion of the method used by the **Office** to assess the factors set forth in subdivision (b) shall be subject to peer review as described in Section 57004 or in a manner consistent with the peer review requirements of Section 57004. Any person may submit any information for consideration by the entity conducting the peer review, which may receive oral testimony.
- (d)
  - (1) No later than December 31, 2000, the state board in consultation with the **Office**, shall review all existing health-based ambient air quality standards to determine whether, based on public health, scientific literature, and exposure pattern data, the standards adequately protect the health of the public, including infants and children, with an adequate margin of safety. The state board shall publish a report summarizing these findings.
  - (2) The state board shall revise the highest priority ambient air quality standard determined to be inadequate to protect infants and children with an adequate margin of safety, based on its



report, no later than December 31, 2002. Following the revision of the highest priority standard, the state board shall revise any additional standards determined to be inadequate to protect infants and children with an adequate margin of safety, at the rate of at least one per year. The standards shall be established at levels that adequately protect the health of the public, including infants and children, with an adequate margin of safety.

- (e) Nothing in this section shall restrict the authority of the state board to consider additional information in establishing ambient air quality standards or to adopt an ambient air quality standard designed to protect vulnerable populations other than infants and children.

39619.6.

- (a) By June 30, 2002, the state board and the State Department of Health Services, in consultation with the State Department of Education, the Department of General Services, and the **Office of Environmental Health Hazard Assessment**, shall conduct a comprehensive study and review of the environmental health conditions in portable classrooms, as defined in subdivision (k) of Section 17070.15 of the Education Code.
- (b) The state board and the department shall jointly coordinate the study, oversee data analysis and quality assurance, coordinate stakeholder participation, and prepare recommendations. The state board shall develop and oversee the contract for field work, air monitoring, and data analysis, and obtain equipment for the study. The department shall oversee the assessment of ventilation systems and practices and the evaluation of microbiological contaminants, and may provide laboratory analyses as needed.
- (c) By August 31, 2000, the state board shall release a request for proposals for the field portion of the study. Field work shall begin not later than July 2001. The final report shall be completed on or before June 30, 2002, and shall be provided to the appropriate policy committees of the Legislature. The study of portable classrooms shall include all of the following:
  - (1) Review of design and construction specifications, including those for ventilation systems.
  - (2) Review of school maintenance practices, including the actual operation or nonoperation of ventilation systems.
  - (3) Assessment of indoor air quality.
  - (4) Assessment of potential toxic contamination, including molds and other biological contaminants.
- (d) The final report shall summarize the results of the study and review, and shall include recommendations to remedy and prevent unhealthful conditions found in portable classrooms, including the need for all of the following:
  - (1) Modified design and construction standards, including ventilation specifications.
  - (2) Emission limits for building materials and classroom furnishings.
  - (3) Other mitigation actions to ensure the protection of children's health.

39660.

- (a) Upon the request of the state board, the **Office**, in consultation with and with the participation of the state board, shall evaluate the health effects of and prepare recommendations regarding substances, other than pesticides in their pesticidal use, which may be or are emitted into the ambient air of California and that may be determined to be toxic air contaminants.
- (b) In conducting this evaluation, the **Office** shall consider all available scientific data, including, but not limited to, relevant data provided by the state board, the State Department of Health Services, the Occupational Safety and Health Division of the Department of Industrial Relations, the Department of Pesticide Regulation, international and federal health agencies, private industry, academic researchers, and public health and environmental organizations. The evaluation shall be performed using current principles, practices, and methods used by public health professionals who are experienced practitioners in the fields of epidemiology, human health effects assessment, risk assessment, and toxicity.

- (c) (1) The evaluation shall assess the availability and quality of data on health effects, including potency, mode of action, and other relevant biological factors, of the substance, and shall, to the extent that information is available, assess all of the following:
  - (A) Exposure patterns among infants and children that are likely to result in disproportionately high exposure to ambient air pollutants in comparison to the general population.
  - (B) Special susceptibility of infants and children to ambient air pollutants in comparison to the general population.
  - (C) The effects on infants and children of exposure to toxic air contaminants and other substances that have a common mechanism of toxicity.
  - (D) The interaction of multiple air pollutants on infants and children, including the interaction between criteria air pollutants and toxic air contaminants.
- (2) The evaluation shall also contain an estimate of the levels of exposure that may cause or contribute to adverse health effects. If it can be established that a threshold of adverse health effects exists, the estimate shall include both of the following factors:
  - (A) The exposure level below which no adverse health effects are anticipated.
  - (B) An ample margin of safety that accounts for the variable effects that heterogeneous human populations exposed to the substance under evaluation may experience, the uncertainties associated with the applicability of the data to human beings, and the completeness and quality of the information available on potential human exposure to the substance. In cases in which there is no threshold of significant adverse health effects, the **Office** shall determine the range of risk to humans resulting from current or anticipated exposure to the substance.
- (3) The scientific basis or scientific portion of the method used by the **Office** to assess the factors set forth in this subdivision shall be reviewed in a manner consistent with this chapter by the Scientific Review Panel on Toxic Air Contaminants established pursuant to Article 5 (commencing with Section 39670). Any person may submit any information for consideration by the panel, which may receive oral testimony.
- (d) The **Office** shall submit its written evaluation and recommendations to the state board within 90 days after receiving the request of the state board pursuant to subdivision (a). The **Office** may, however, petition the state board for an extension of the deadline, not to exceed 30 days, setting forth its statement of the reasons that prevent the **Office** from completing its evaluation and recommendations within 90 days. Upon receipt of a request for extension of, or noncompliance with, the deadline contained in this section, the state board shall immediately transmit to the Assembly Committee on Rules and the Senate Committee on Rules, for transmittal to the appropriate standing, select, or joint committee of the Legislature, a statement of reasons for extension of the deadline, along with copies of the **Office's** statement of reasons that prevent it from completing its evaluation and recommendations in a timely manner.
- (e) (1) The state board or a district may request, and any person shall provide, information on any substance that is or may be under evaluation and that is manufactured, distributed, emitted, or used by the person of whom the request is made, in order to carry out its responsibilities pursuant to this chapter. To the extent practical, the state board or a district may collect the information in aggregate form or in any other manner designed to protect trade secrets.
- (2) Any person providing information pursuant to this subdivision may, at the time of submission, identify a portion of the information submitted to the state board or a district as a trade secret and shall support the claim of a trade secret, upon the written request of the state board or district board. Subject to Section 1060 of the Evidence Code, information supplied that is a trade secret, as specified in Section 6254.7 of the Government Code, and that is so marked at the time of submission, shall not be released to any member of the public. This section does not prohibit the exchange of properly designated trade secrets between public

agencies when those trade secrets are relevant and necessary to the exercise of their jurisdiction if the public agencies exchanging those trade secrets preserve the protections afforded that information by this paragraph.

- (3) Any information not identified as a trade secret shall be available to the public unless exempted from disclosure by other provisions of law. The fact that information is claimed to be a trade secret is public information. Upon receipt of a request for the release of information that has been claimed to be a trade secret, the state board or district shall immediately notify the person who submitted the information, and shall determine whether or not the information claimed to be a trade secret is to be released to the public. The state board or district board, as the case may be, shall make its determination within 60 days after receiving the request for disclosure, but not before 30 days following the notification of the person who submitted the information. If the state board or district decides to make the information public, it shall provide the person who submitted the information 10 days' notice prior to public disclosure of the information.
- (f) The **Office** and the state board shall give priority to the evaluation and regulation of substances based on factors related to the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community. In determining the importance of these factors, the **Office** and the state board shall consider all of the following information, to the extent that it is available:
  - (1) Research and monitoring data collected by the state board and the districts pursuant to Sections 39607, 39617.5, 39701, and 40715, and by the United States Environmental Protection Agency pursuant to paragraph (2) of subsection (k) of Section 112 of the federal act (42 U.S.C. Sec. 7412(k)(2)).
  - (2) Emissions inventory data reported for substances subject to Part 6 (commencing with Section 44300) and the risk assessments prepared for those substances.
  - (3) Toxic chemical release data reported to the state emergency response commission pursuant to Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (42 U.S.C. Sec. 11023) and Section 6607 of the Pollution Prevention Act of 1990 (42 U.S.C. Sec. 13106).
  - (4) Information on estimated actual exposures to substances based on geographic and demographic data and on data derived from analytical methods that measure the dispersion and concentrations of substances in ambient air.

#### 39660.5.

- (a) In evaluating the level of potential human exposure to toxic air contaminants, the state board shall assess that exposure in indoor environments as well as in ambient air conditions.
- (b) The state board shall consult with the State Department of Health Services, pursuant to the program on indoor environmental quality established under Chapter 7 (commencing with Section 105400) of Part 5 of Division 103, concerning what potential toxic air contaminants may be found in the indoor environment and on the best methodology for measuring exposure to these contaminants.
- (c) When the state board identifies toxic air pollutants that have been found in any indoor environment, the state board shall refer all available data on that exposure and the suspected source of the pollutant to the State Department of Health Services, the Division of Occupational Safety and Health of the Department of Industrial Relations, the State Energy Resources Conservation and Development Commission, the Department of Housing and Community Development, and the Department of Consumer Affairs.
- (d) In assessing human exposure to toxic air contaminants in indoor environments pursuant to this section, the state board shall identify the relative contribution to total exposure to the contaminant from indoor concentrations, taking into account both ambient and indoor air environments.

39661.

- (a) (1) Upon receipt of the evaluation and recommendations prepared pursuant to Section 39660, the state board, in consultation with, and with the participation of, the **Office**, shall prepare a report in a form which may serve as the basis for regulatory action regarding a particular substance pursuant to subdivisions (b) and (c) of Section 39662.
- (2) The report shall include and be developed in consideration of the evaluation and recommendations of the **Office**.
- (b) The report, together with the scientific data on which the report is based, shall, with the exception of trade secrets, be made available to the public and shall be formally reviewed by the scientific review panel established pursuant to Section 39670. The panel shall review the scientific procedures and methods used to support the data, the data itself, and the conclusions and assessments on which the report is based. Any person may submit any information for consideration by the panel, which may, at its discretion, receive oral testimony. The panel shall submit its written findings to the state board within 45 days after receiving the report. The panel may, however, petition the state board for an extension of the deadline, which may not exceed 15 working days.
- (c) If the scientific review panel determines that the health effects report is not based upon sound scientific knowledge, methods, or practices, the report shall be returned to the state board, and the state board, in consultation with, and with the participation of, the **Office**, shall prepare revisions to the report which shall be resubmitted, within 30 days following receipt of the panel's determination, to the scientific review panel which shall review the report in conformance with subdivision (b) prior to a formal proposal by the state board pursuant to Section 39662.

39662.

- (a) Within 10 working days following receipt of the findings of the scientific review panel pursuant to subdivision (c) of Section 39661, the state board shall prepare a hearing notice and a proposed regulation which shall include the proposed determination as to whether a substance is a toxic air contaminant.
- (b) After conducting a public hearing pursuant to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, the state board shall list, by regulation, substances determined to be toxic air contaminants.
- (c) If a substance is determined to be a toxic air contaminant, the regulation shall specify a threshold exposure level, if any, below which no significant adverse health effects are anticipated, and an ample margin of safety which accounts for the factors described in subdivision (c) of Section 39660.
- (d) In evaluating the nature of the adverse health effect and the range of risk to humans from exposure to a substance, the state board shall utilize scientific criteria which are protective of public health, consistent with current scientific data.
- (e) Any person may petition the state board to review a determination made pursuant to this section. The petition shall specify the additional scientific evidence regarding the health effects of a substance which was not available at the time the original determination was made and any other evidence which would justify a revised determination.

39669.5. The Legislature finds and declares that certain toxic air contaminants may pose risks that cause infants and children to be especially susceptible to illness and that certain actions are necessary to ensure their safety from toxic air contaminants.

- (a) By July 1, 2001, the following shall occur:
  - (1) The **Office**, in consultation with the state board, shall establish a list of up to five toxic air contaminants identified or designated by the state board pursuant to Section 39657 that may cause infants and children to be especially susceptible to illness. In developing the list, the **Office** shall take into account public exposures to toxic air contaminants, whether by

themselves or interacting with other toxic air contaminants or criteria pollutants, and the factors listed in subdivision (c) of Section 39660. The **Office** shall submit a report containing the list and its reasons for including the toxic air contaminants on the list to the Scientific Review Panel on Toxic Air Contaminants established pursuant to Article 5 (commencing with Section 39670).

- (2) The scientific review panel, in a manner consistent with this chapter, shall review the list of toxic air contaminants submitted by the **Office** pursuant to paragraph (1). As part of the review, any person may submit any information for consideration by the panel, which may receive oral testimony.
- (b) (1) Within two years of the establishment of the list required pursuant to subdivision (a), the state board shall review and, as appropriate, revise any control measures adopted for the toxic air contaminants identified on the list, to reduce exposure to those toxic air contaminants pursuant to Article 4 (commencing with Section 39665), to protect public health, and particularly infants and children.
- (2) Within three years of the establishment of the list required pursuant to subdivision (a), for up to five of those toxic air contaminants for which no control measures have been previously adopted, the state board shall prepare a report on the need for regulations, following the procedure specified in Section 39665. The state board shall adopt within that same three-year timeframe, as appropriate, any new control measures to reduce exposure to those toxic air contaminants pursuant to Article 4 (commencing with Section 39665), to protect public health, particularly infants and children.
- (c) Beginning July 1, 2004, the **Office** shall annually evaluate at least 15 toxic air contaminants identified or designated by the state board pursuant to Section 39657, and provide threshold exposure levels and nonthreshold health values, as appropriate, for those toxic air contaminants. The activities required pursuant to this subdivision shall continue until all toxic air contaminants are evaluated. The levels shall be established pursuant to the procedures adopted for health and risk assessments pursuant to paragraph (2) of subdivision (b) of Section 44360, and taking into account the factors listed in subdivision (c) of Section 39660. Based on this evaluation, and after review by the scientific review panel as prescribed in paragraph (2) of subdivision (a), the **Office** shall update the list established pursuant to subdivision (a), by July 1, 2005, and each year thereafter. Within three years of the initial or subsequent listing update, for up to five of the toxic air contaminants contained on that list for which no control measures have been previously adopted, or for at least five of the toxic air contaminants if more than five toxic air contaminants have been identified, the state board shall prepare a report on the need for regulation, following the procedure specified in Section 39665. The state board shall adopt within that three-year timeframe, as appropriate, new control measures, pursuant to Article 4 (commencing with Section 39665), to reduce exposure to those toxic air contaminants, to protect public health, and particularly infants and children.
- (d) Toxic air contaminants evaluated and listed pursuant to this section shall not include substances in those uses that are not subject to regulation by the state board pursuant to this chapter.

39670.

- (a) A nine-member Scientific Review Panel on Toxic Air Contaminants shall be appointed to advise the state board and the Department of Pesticide Regulation in their evaluation of the health effects toxicity of substances pursuant to Article 3 (commencing with Section 39660) of this chapter and Article 1.5 (commencing with Section 14021) of Chapter 3 of Division 7 of the Food and Agricultural Code.
- (b) The members of the panel shall be highly qualified and professionally active or engaged in the conduct of scientific research, and shall be appointed as follows, subject to Section 39671, for a term of three years:
  - (1) Five members shall be appointed by the Secretary for Environmental Protection, one of

- whom shall be qualified as a pathologist, one of whom shall be qualified as an oncologist, one of whom shall be qualified as an epidemiologist, one of whom shall be qualified as an atmospheric scientist, and one who shall have relevant scientific experience and shall be experienced in the operation of scientific review or advisory bodies.
- (2) Two members shall be appointed by the Senate Committee on Rules, one of whom shall be qualified as a biostatistician and one of whom shall be a physician or scientist specializing in occupational medicine.
  - (3) Two members shall be appointed by the Speaker of the Assembly, one of whom shall be qualified as a toxicologist and one of whom shall be qualified as a biochemist or molecular biologist.
  - (4) Members of the panel shall be appointed from a pool of nominees submitted to each appointing body by the President of the University of California. The pool shall include, at a minimum, three nominees for each discipline represented on the panel, and shall include only individuals who hold, or have held, academic or equivalent appointments at universities and their affiliates in California.
- (c) The Secretary for Environmental Protection shall appoint a member of the panel to serve as chairperson.
  - (d) The panel may utilize special consultants or establish ad hoc committees, which may include other scientists, to assist it in performing its functions.
  - (e) Members of the panel, and any ad hoc committee established by the panel, shall submit annually a financial disclosure statement that includes a listing of income received within the preceding three years, including investments, grants, and consulting fees derived from individuals or businesses which might be affected by regulatory actions undertaken by the state board or districts pursuant to this chapter. The financial disclosure statements submitted pursuant to this subdivision are public information. Members of the panel shall be subject to the disqualification requirements of Section 87100 of the Government Code.
  - (f) Members of the panel shall receive one hundred dollars (\$100) per day for attending panel meetings and meetings of the state board, or upon authorization of the chairperson of the state board while on official business of the panel, and shall be reimbursed for actual and necessary travel expenses incurred in the performance of their duties.
  - (g) The state board and the **Office of Environmental Health Hazard Assessment**, and, in the case of economic poisons, the Department of Pesticide Regulation, shall provide sufficient resources for support of the panel, including technical, administrative, and clerical support, which shall include, but not be limited to, office facilities and staff sufficient for the maintenance of files, scheduling of meetings, arrangement of travel accommodations, and preparation of panel findings, as required by subdivision (b) of Section 39661.

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## Toxic Air Contaminants: Pesticides

### *Food and Agricultural Code*

14021.

- (a) As used in this article, "pesticide" is defined in Section 12753.
- (b) For purposes of this article, "toxic air contaminant" means an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Pesticides that have been identified as hazardous air pollutants pursuant to Section 7412 of Title 42 of the United States Code shall be identified by the director as toxic air contaminants.

14022.

- (a) In consultation with the **Office of Environmental Health Hazard Assessment** and the State Air Resources Board, the director shall evaluate the health effects of pesticides which may be or are emitted into the ambient air of California and which may be determined to be a toxic air contaminant which poses a present or potential hazard to human health. Upon request of the State Air Resources Board, the director shall include a pesticide for evaluation.
- (b) The director shall complete the evaluation of a pesticide within 90 days after receiving the scientific data specified in subdivision (c) from the **Office** and the State Air Resources Board. The director may extend the 90-day deadline for a period not to exceed 30 days if the director transmits to the Assembly Committee on Rules and the Senate Committee on Rules, for transmittal to the appropriate standing, select, or joint committee of the Legislature, a statement of reasons for extension of the deadline.
- (c) In conducting this evaluation, the director shall consider all available scientific data, including, but not limited to, relevant data provided by the **Office**, the Occupational Safety and Health Division of the Department of Industrial Relations, international and federal health agencies, private industry, academic researchers, and public health and environmental organizations. At the request of the director, the State Air Resources Board shall document the level of airborne emissions and the **Office** shall provide an assessment of related health effects of pesticides which may be determined to pose a present or potential hazard and each agency shall provide technical assistance to the department as it conducts its evaluation.
- (d) The director may request, and any person shall provide, information on any substance which is or may be under evaluation and which is manufactured, distributed, or used by the person to whom the request is made, in order to carry out his or her responsibilities pursuant to this chapter. Any person providing information pursuant to this subdivision shall, at the request of the director, identify that portion of the information submitted to the department which is a trade secret and, upon the request of the director, shall provide documentation to support the claim of the trade secret. Information supplied which is a trade secret, as specified in Section 6254.7 of the Government Code, and which is so marked at the time of submission shall not be released to the public by the director, except in accordance with Section 1060 of the Evidence Code and Section 21160 of the Public Resources Code.
- (e) The director shall give priority to the evaluation and regulation of substances based on factors related to the risk of harm to public health, amount or potential amount of emissions, manner of usage of the pesticide in California, persistence in the atmosphere, and ambient concentrations in the community.

14023.

- (a) Upon completion of the evaluation conducted pursuant to Section 14022, the **Office of Environmental Health Hazard Assessment** shall prepare a report on the health effects of the pesticide which may be determined to be a toxic air contaminant which poses a present or potential hazard to human health due to airborne emission from its use. The report shall assess the availability and quality of data on health effects, including potency, mode of action, and other relevant biological factors, of the substance. The report shall also contain an estimate of the levels of exposure which may cause or contribute to adverse health effects and, in the case where there is no threshold of significant adverse health effects, the range of risk to humans, resulting from current or anticipated exposure. The report shall include the findings of the **Office**. The report shall be made available to the public, subject to subdivision (d) of Section 14022.
- (b) The report prepared pursuant to subdivision (a) shall be formally reviewed by the scientific review panel established according to Section 39670 of the Health and Safety Code. The director shall also make available the data deemed necessary to the scientific review panel, according to departmental procedures established to ensure confidentiality of proprietary information. The panel shall review, as appropriate, the scientific data on which the report is based, the scientific procedures and methods used to support the data, and the conclusions and assessments on which the report is based. The panel shall submit its written findings to the director within 45 days after receiving the report, but it may petition the director for an extension of the deadline, which may not exceed 15 working days.
- (c) If the scientific review panel determines that the health effects report is seriously deficient, the report shall be returned to the director who shall revise and resubmit the report, within 30 days following receipt of the panel's determination, to the panel prior to development of emission control measures.
- (d) Within 10 working days following receipt of the findings of the scientific review panel pursuant to subdivision (b), the director shall prepare a hearing notice and a proposed regulation which shall include the proposed determination as to whether a pesticide is a toxic air contaminant. After conducting a public hearing pursuant to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, the director shall list, by regulation, pesticides determined to be toxic air contaminants.
- (e) The director shall determine, in consultation with the **Office**, the State Air Resources Board, and the air pollution control districts or air quality management districts in the affected counties, the need for and appropriate degree of control measures for each pesticide listed as a toxic air contaminant pursuant to subdivision (d). Any person may submit written information for consideration by the director in making determinations on control measures.

14024.

- (a) For those pesticides for which a need for control measures has been determined pursuant to subdivision (e) of Section 14023 and pursuant to provisions of this code, the director, in consultation with the agricultural commissioners and air pollution control districts and air quality management districts in the affected counties, shall develop control measures designed to reduce emissions sufficiently so that the source will not expose the public to the levels of exposure which may cause or contribute to significant adverse health effects. Where no demonstrable safe level or threshold of significant adverse health effects has been established by the director, the control measures shall be designed to adequately prevent an endangerment of public health through the application of best practicable control techniques.
- (b) Best practicable control techniques may include, but are not limited to, the following:
  - (1) Label amendments.
  - (2) Applicator training.
  - (3) Restrictions on use patterns or locations.
  - (4) Changes in application procedures.



- (5) Reclassification as a restricted material.
  - (6) Cancellation.
- (c) After conducting a public hearing pursuant to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, the director shall adopt, by regulation, control measures, including application of the best practicable control techniques enumerated in subdivision (b) or any other best applicable control technique, for those pesticides for which a need has been determined.

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## **Air Emissions: Air Toxic Hot Spots**

### ***Health and Safety Code***

44300. This part shall be known and may be cited as the Air Toxics "Hot Spots" Information and Assessment Act of 1987.

44301. The Legislature finds and declares all of the following:

- (a) In the wake of recent publicity surrounding planned and unplanned releases of toxic chemicals into the atmosphere, the public has become increasingly concerned about toxics in the air.
- (b) The Congressional Research Service of the Library of Congress has concluded that 75 percent of the United States population lives in proximity to at least one facility that manufactures chemicals. An incomplete 1985 survey of large chemical companies conducted by the Congressional Research Service documented that nearly every chemical plant studied routinely releases into the surrounding air significant levels of substances proven to be or potentially hazardous to public health.
- (c) Generalized emissions inventories compiled by air pollution control districts and air quality management districts in California confirm the findings of the Congressional Research Service survey as well as reveal that many other facilities and businesses which do not actually manufacture chemicals do use hazardous substances in sufficient quantities to expose, or in a manner that exposes, surrounding populations to toxic air releases.
- (d) These releases may create localized concentrations or air toxics "hot spots" where emissions from specific sources may expose individuals and population groups to elevated risks of adverse health effects, including, but not limited to, cancer and contribute to the cumulative health risks of emissions from other sources in the area. In some cases where large populations may not be significantly affected by adverse health risks, individuals may be exposed to significant risks.
- (e) Little data is currently available to accurately assess the amounts, types, and health impacts of routine toxic chemical releases into the air. As a result, there exists significant uncertainty about the amounts of potentially hazardous air pollutants which are released, the location of those releases, and the concentrations to which the public is exposed.
- (f) The State of California has begun to implement a long-term program to identify, assess, and control ambient levels of hazardous air pollutants, but additional legislation is needed to provide for the collection and evaluation of information concerning the amounts, exposures, and short- and long-term health effects of hazardous substances regularly released to the surrounding atmosphere from specific sources of hazardous releases.
- (g) In order to more effectively implement control strategies for those materials posing an unacceptable risk to the public health, additional information on the sources of potentially hazardous air pollutants is necessary.
- (h) It is in the public interest to ascertain and measure the amounts and types of hazardous releases and potentially hazardous releases from specific sources that may be exposing people to those releases, and to assess the health risks to those who are exposed.

44302. The definitions set forth in this chapter govern the construction of this part.

44303. "Air release" or "release" means any activity that may cause the issuance of air contaminants, including the actual or potential spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a substance into the ambient air and that results

from the routine operation of a facility or that is predictable, including, but not limited to, continuous and intermittent releases and predictable process upsets or leaks.

44304. "Facility" means every structure, appurtenance, installation, and improvement on land, which is associated with a source of air releases or potential air releases of a hazardous material.

44306. "Health risk assessment" means a detailed comprehensive analysis prepared pursuant to Section 44361 to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure.

44307. "Operator" means the person who owns or operates a facility or part of a facility.

44308. "Plan" means the emissions inventory plan which meets the conditions specified in Section 44342.

44309. "Report" means the emissions inventory report specified in Section 44341.

44320. This part applies to the following:

- (a) Any facility which manufactures, formulates, uses, or releases any of the substances listed pursuant to Section 44321 or any other substance which reacts to form a substance listed in Section 44321 and which releases or has the potential to release total organic gases, particulates, or oxides of nitrogen or sulfur in the amounts specified in Section 44322.
- (b) Except as provided in Section 44323, any facility which is listed in any current toxics use or toxics air emission survey, inventory, or report released or compiled by a district. A district may, with the concurrence of the state board, waive the application of this part pursuant to this subdivision for any facility which the district determines will not release any substance listed pursuant to Section 44321 due to a shutdown or a process change.

44321. For the purposes of Section 44320, the state board shall compile and maintain a list of substances that contains, but is not limited to, all of the following:

- (a) Substances identified by reference in paragraph (1) of subdivision (b) of Section 6382 of the Labor Code and substances placed on the list prepared by the National Toxicology Program and issued by the United States Secretary of Health and Human Services pursuant to paragraph (4) of subsection (b) of Section 241 of Title 42 of the United States Code. For the purposes of this subdivision, the state board may remove from the list any substance which meets both of the following criteria:
  - (1) No evidence exists that it has been detected in air.
  - (2) The substance is not manufactured or used in California, or, if manufactured or used in California, because of the physical or chemical characteristics of the substance or the manner in which it is manufactured or used, there is no possibility that it will become airborne.
- (b) Carcinogens and reproductive toxins referenced in or compiled pursuant to Section 25249.8, except those which meet both of the criteria identified in subdivision (a).
- (c) Substances designated by the state board as toxic air contaminants pursuant to subdivision (b) of Section 39657 and substances on the candidate list of potential toxic air contaminants and the list of designated toxic air contaminants prepared by the state board pursuant to Article 3 (commencing with Section 39660) of Chapter 3.5 of Part 2, including, but not limited to, all substances currently under review and scheduled or nominated for review and substances identified and listed for which health effects information is limited.
- (d) Substances for which an information or hazard alert has been issued by the repository of current data established pursuant to Section 147.2 of the Labor Code.

- (e) Substances reviewed, under review, or scheduled for review as air toxics or potential air toxics by the Office of Air Quality Planning and Standards of the Environmental Protection Agency, including substances evaluated in all of the following categories or their equivalent: preliminary health and source screening, detailed assessment, intent to list, decision not to regulate, listed, standard proposed, and standard promulgated.
- (f) Any additional substances recognized by the state board as presenting a chronic or acute threat to public health when present in the ambient air, including, but not limited to, any neurotoxins or chronic respiratory toxicants not included within subdivision (a), (b), (c), (d), or (e).

44322. This part applies to facilities specified in subdivision (a) of Section 44320 in accordance with the following schedule:

- (a) For those facilities that release, or have the potential to release, 25 tons per year or greater of total organic gases, particulates, or oxides of nitrogen or sulfur, this part becomes effective on July 1, 1988.
- (b) For those facilities that release, or have the potential to release, more than 10 but less than 25 tons per year of total organic gases, particulates, or oxides of nitrogen or sulfur, this part becomes effective July 1, 1989.
- (c) For those facilities that release, or have the potential to release, less than 10 tons per year of total organic gases, particulates, or oxides of nitrogen or sulfur, the state board shall, on or before July 1, 1990, prepare and submit a report to the Legislature identifying the classes of those facilities to be included in this part and specifying a timetable for their inclusion.

44323. A district may prepare an industry wide emissions inventory and health risk assessment for facilities specified in subdivision (b) of Section 44320 and subdivisions (a) and (b) of Section 44322, and shall prepare an industry wide emissions inventory for the facilities specified in subdivision (c) of Section 44322, in compliance with this part for any class of facilities that the district finds and determines meets all of the following conditions:

- (a) All facilities in the class fall within one four-digit Standard Industrial Classification Code.
- (b) Individual compliance with this part would impose severe economic hardships on the majority of the facilities within the class.
- (c) The majority of the class is composed of small businesses.
- (d) Releases from individual facilities in the class can easily and generically be characterized and calculated.

44324. This part does not apply to any facility where economic poisons are employed in their pesticidal use, unless that facility was subject to district permit requirements on or before August 1, 1987. As used in this section, "pesticidal use" does not include the manufacture or formulation of pesticides.

44325. Any solid waste disposal facility in compliance with Section 41805.5 is in compliance with the emissions inventory requirements of this part.

44343. The district shall review the reports submitted pursuant to Section 44341 and shall, within 90 days, review each report, obtain corrections and clarifications of the data, and notify the **Office of Environmental Health Hazard Assessment**, the Department of Industrial Relations, and the city or county health department of its findings and determinations as a result of its review of the report.

44360.

- (a) Within 90 days of completion of the review of all emissions inventory data for facilities specified in subdivision (a) of Section 44322, but not later than December 1, 1990, the district shall, based on examination of the emissions inventory data and in consultation with the state board and the **Office of Environmental Health Hazard Assessment**, prioritize and then categorize those facilities for

the purposes of health risk assessment. The district shall designate high, intermediate, and low priority categories and shall include each facility within the appropriate category based on its individual priority. In establishing priorities pursuant to this section, the district shall consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, daycare centers, worksites, and residences, and any other factors that the district finds and determines may indicate that the facility may pose a significant risk to receptors. The district shall hold a public hearing prior to the final establishment of priorities and categories pursuant to this section.

- (b) Within 150 days of the designation of priorities and categories pursuant to subdivision (a), the operator of every facility that has been included within the highest priority category shall prepare and submit to the district a health risk assessment pursuant to Section 44361. The district may, at its discretion, grant a 30-day extension for submittal of the health risk assessment.
- (c) Upon submission of emissions inventory data for facilities specified in subdivisions (b) and (c) of Section 44322, the district shall designate facilities for inclusion within the highest priority category, as appropriate, and any facility so designated shall be subject to subdivision (b). In addition, the district may require the operator of any facility to prepare and submit health risk assessments, in accordance with the priorities developed pursuant to subdivision (a).
- (d) The district shall, except where site specific factors may affect the results, allow the use of a single health risk assessment for two or more substantially identical facilities operated by the same person.

#### 44361.

- (a) Each health risk assessment shall be submitted to the district. The district shall make the health risk assessment available for public review, upon request. After preliminary review of the emissions impact and modeling data, the district shall submit the health risk assessment to the **Office of Environmental Health Hazard Assessment** for review and, within 180 days of receiving the health risk assessment, the **Office** shall submit to the district its comments on the data and findings relating to health effects. The district shall consult with the state board as necessary to adequately evaluate the emissions impact and modeling data contained within the risk assessment.
- (b) For the purposes of complying with this section, the **Office of Environmental Health Hazard Assessment** may select a qualified independent contractor to review the data and findings relating to health effects. The **Office** shall not select an independent contractor to review a specific health risk assessment who may have a conflict of interest with regard to the review of that health risk assessment. Any review by an independent contractor shall comply with the following requirements:
  - (1) Be performed in a manner consistent with guidelines provided by the **Office**.
  - (2) Be reviewed by the **Office** for accuracy and completeness.
  - (3) Be submitted by the **Office** to the district in accordance with this section.
- (c) The district shall reimburse the **Office of Environmental Health Hazard Assessment** or the qualified independent contractor designated by the **Office** pursuant to subdivision (b), within 45 days of its request, for its actual costs incurred in reviewing a health risk assessment pursuant to this section.
- (d) If a district requests the **Office of Environmental Health Hazard Assessment** to consult with the district concerning any requirement of this part, the district shall reimburse the **Office**, within 45 days of its request, for the costs incurred in the consultation.
- (e) Upon designation of the high priority facilities, as specified in subdivision (a) of Section 44360, the **Office of Environmental Health Hazard Assessment** shall evaluate the staffing requirements of this section and may submit recommendations to the Legislature, as appropriate, concerning the maximum number of health risk assessments to be reviewed each year pursuant to this section.

44362.

- (a) Taking the comments of the **Office of Environmental Health Hazard Assessment** into account, the district shall approve or return for revision and resubmission and then approve, the health risk assessment within 180 days of receipt. If the health risk assessment has not been revised and resubmitted within 60 days of the district's request of the operator to do so, the district may modify the health risk assessment and approve it as modified.
- (b) Upon approval of the health risk assessment, the operator of the facility shall provide notice to all exposed persons regarding the results of the health risk assessment prepared pursuant to Section 44361 if, in the judgment of the district, the health risk assessment indicates there is a significant health risk associated with emissions from the facility. If notice is required under this subdivision, the notice shall include only information concerning significant health risks attributable to the specific facility for which the notice is required. Any notice shall be made in accordance with procedures specified by the district.

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## Incineration

### Hazardous Waste

#### *Health and Safety Code*

41982. The state board shall, after completing the study referred to in Section 41981, in consultation with the affected districts the Department of Toxic Substances Control, and the **Office of Environmental Health Hazard Assessment**, and after public hearings, establish guidelines for the issuance of permits by the districts for the incineration of toxic waste materials. The guidelines shall take into consideration factors including, but not limited to, the following:

- (a) The characteristics of the toxic waste materials to be incinerated.
- (b) The methods or equipment available to minimize or eliminate the emission of air contaminants.
- (c) The applicable federal standards, including, but not limited to, the regulations <<-found->> in Part 264 of Title 40 of the Code of Federal Regulations (40 CFR 264) concerning standards for owners and operators of hazardous waste treatment, storage, and disposal facilities. Where the guidelines deviate from the adopted federal standards, the reason for the difference shall be noted by the state board.

### Municipal Waste

#### *Health and Safety Code*

42315.

- (a) No district shall issue or renew a permit for the construction of, renew a permit for the operation of, or issue a determination of compliance for, any project which burns municipal waste or refuse-derived fuel unless all of the following conditions have been met:
  - (1) The project will not prevent or interfere with the attainment or maintenance of state and federal ambient air quality standards.
  - (2) The project will comply with all applicable emission limitations established prior to issuance of the permit or the determination of compliance.
  - (3) The project will, after issuance of the permit or determination of compliance, comply with toxic air contaminant control measures adopted by the district pursuant to Section 39666, and regulations adopted by the district pursuant to Section 41700 for the protection of public health. Notwithstanding Section 42301.5, compliance with this subdivision shall be consistent with a reasonable schedule, as determined by the district.
- (4) (A) A health risk assessment is performed and is submitted by the district to both the state board and the **Office of Environmental Health Hazard Assessment** for review. The state board shall review and, within 15 days, notify the district and the applicant as to whether the data pertaining to emissions and their impact on ambient air quality are adequate for completing its review pursuant to this subdivision, and what additional data, if any, are required to complete its review. Within 45 days of receiving the health risk assessment, the state board shall submit its comments in writing to the district, on the data pertaining to emissions and their impact on ambient air quality. The district shall forward a copy of the comments of the state board to the **Office**. The **Office** shall review and, within 90 days of receiving the health risk assessment, shall submit its comments to the district on the data and findings relating to health effects

- (B) For purposes of complying with the requirements of this paragraph, the **Office of Environmental Health Hazard Assessment** may select a qualified independent contractor to review the data and findings relating to health effects. In those cases, the review by the independent contractor shall comply with the following requirements:
    - (i) Be performed in a manner consistent with guidelines provided by the **Office**.
    - (ii) Be reviewed by the **Office** for accuracy and completeness.
    - (iii) Be submitted by the **Office** to the district in accordance with the schedules established by this paragraph.
  - (C) Notwithstanding Section 6103 of the Government Code, the district shall reimburse the **Office of Environmental Health Hazard Assessment**, or a qualified independent contractor designated by the **Office** pursuant to subparagraph (B), for its actual costs incurred in reviewing a health risk assessment for any project subject to this section.
  - (D) An application for any project which burns municipal waste or refuse- derived fuel is not complete until both of the following have been accomplished:
    - (i) The health risk assessment has been performed and is submitted to the district.
    - (ii) The state board and the **Office of Environmental Health Hazard Assessment**, or a qualified independent contractor designated by the **Office** pursuant to subparagraph (B) have completed their review pursuant to this paragraph, and have submitted their comments to the district, unless the state board and the **Office** have failed to submit their comments to the district within 90 days and the district makes a finding that the application contains sufficient information for the district to begin its initial review.
  - (E) This paragraph shall not apply to an application for permit renewal for any project otherwise subject to this section.
- (5) The district finds and determines, based upon the health risk assessment, comments from the state board and the **Office of Environmental Health Hazard Assessment**, and any other relevant information, that no significant increase in the risk of illness or mortality, including, but not limited to, increases in the risk of cancer and birth defects, is anticipated as a result of air pollution from the construction and operation of the project. This paragraph shall not apply to an application for permit renewal for any project otherwise subject to this section.
- (6) Prior to, and during, commercial operation of the project, periodic monitoring of emissions, including, but not limited to, toxic air contaminants, is performed pursuant to specifications established by the district.
- (b) This section does not prohibit a district from requiring ambient air monitoring under any other provision of law.
  - (c) This section does not apply to any project which does any of the following:
    - (1) Exclusively burns digester gas produced from manure or other animal solid or semisolid waste.
    - (2) Exclusively burns methane gas produced from a disposal site as defined in Section 66714.1 of the Government Code, which is used only for the disposal of solid waste as defined in Section 66719 of the Government Code.
    - (3) Exclusively burns forest, agricultural, wood, or other biomass wastes.
 Nothing in this subdivision is intended to prohibit a district from requiring those projects to meet one or more of the conditions of this section.
  - (d) Nothing in this section prohibits the permit applicant from entering into a contract with any person pursuant to which the person may enforce this section or any other provision of law.

### ***Public Resources Code***

#### **21151.1.**

- (a) Notwithstanding paragraph (6) of subdivision (b) of Section 21080, or Section 21080.5 or 21084, or any other provision of law, a lead agency shall prepare or cause to be prepared by contract, and



certify the completion of, an environmental impact report for any project involving the burning of municipal wastes, hazardous waste, or refuse-derived fuel, including, but not limited to, tires, if the project is either of the following:

- (1) The construction of a new facility.
  - (2) The expansion of an existing facility which burns hazardous waste which would increase its permitted capacity by more than 10 percent. This subdivision does not apply to any project exclusively burning hazardous waste, for which a final determination under Section 21080.1 has been made prior to the effective date of Assembly Bill 58 of the 1989-90 Regular Session.
- (b) For purposes of subdivision (a), the amount of expansion of an existing facility shall be calculated by comparing the proposed facility capacity with whichever of the following is applicable:
- (1) The facility capacity authorized in the facility's hazardous waste facilities permit pursuant to Section 25200 of the Health and Safety Code or its grant of interim status pursuant to Section 25200.5 of the Health and Safety Code, or the facility capacity authorized in any state or local agency permit allowing the construction or operation of a facility for the burning of hazardous waste, granted before January 1, 1990.
  - (2) The facility capacity authorized in the facility's original hazardous waste facilities permit, grant of interim status, or any state or local agency permit allowing the construction or operation of a facility for the burning of hazardous waste, granted on or after January 1, 1990.
- (c) Subdivision (a) does not apply to any project which does any of the following:
- (1) Exclusively burns digester gas produced from manure or any other solid or semisolid animal waste.
  - (2) Exclusively burns methane gas produced from a disposal site as defined in Section 66714.1 of the Government Code, which is used only for the disposal of solid waste as defined in Section 66719 of the Government Code.
  - (3) Exclusively burns forest, agricultural, wood, or other biomass wastes.
  - (4) Exclusively burns hazardous waste in an incineration unit which is transportable and which is either at a site for not longer than three years or is part of a remedial or removal action. For purposes of this paragraph, "transportable" means any equipment which performs a "treatment" as defined in Section 66216 of Title 22 of the California Code of Regulations, and which is transported on a vehicle as defined in Section 66230 of Title 22 of the California Code of Regulations.
  - (5) Exclusively burns refinery waste in a flare on the site of generation.
  - (6) Exclusively burns in a flare methane gas produced at a municipal sewage treatment plant.
  - (7) Exclusively burns hazardous waste, or exclusively burns hazardous waste as a supplemental fuel, as part of a research, development, or demonstration project which, consistent with federal regulations implementing the Resource Conservation and Recovery Act of 1976 (Public Law 94-580) and amendments thereto, has been determined to be innovative and experimental by the Department of Toxic Substances Control and which is limited in type and quantity of waste to that necessary to determine the efficacy and performance capabilities of the technology or process; provided, however, that any facility which operated as a research, development, or demonstration project and for which an application is thereafter submitted for a hazardous waste facility permit for operation other than as a research, development, or demonstration project shall be considered a new facility for the burning of hazardous waste and shall be subject to subdivision (a) of Section 21151.1.
  - (8) Exclusively burns soils contaminated only with petroleum fuels or the vapors from these soils.
  - (9) Exclusively treats less than 3,000 pounds of hazardous waste per day in a thermal processing unit operated in the absence of open flame, and submits a worst-case health risk assessment of the technology to the **Office of Environmental Health Hazard Assessment** for review and distribution to the interested public. This assessment shall be prepared in accordance

with guidelines set forth in the Air Toxics Assessment Manual of the California Air Pollution Control Officers Association.

- (10) Exclusively burns less than 1,200 pounds of infectious waste per day, as defined in Section 25117.5 of the Health and Safety Code, on hospital sites.
- (11) Exclusively burns chemicals and fuels as part of firefighter training.
- (12) Exclusively conducts open burns of explosives subject to the requirements of the air pollution control district, or air quality management district, and in compliance with OSHA and Cal-OSHA regulations.
- (13) Exclusively conducts onsite burning of less than 3,000 pounds per day of fumes directly from a manufacturing or commercial process.
- (d) Subdivision (a) does not apply to any project for which the State Energy Resources Conservation and Development Commission has assumed jurisdiction under Chapter 6 (commencing with Section 25500) of Division 15.
- (e) This section does not exempt any project from any other requirement of this division.

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## Tire Storage and Disposal

### *Public Resources Code*

42820.

- (a) On or before July 1, 1991, the board, in consultation with the State Fire Marshal and the **Office of Environmental Health Hazard Assessment**, shall adopt emergency regulations setting forth the procedures and requirements necessary to obtain a major waste tire facility permit.
- (b) Regulations adopted pursuant to subdivision (a) shall not require the issuance of a separate permit to a solid waste disposal facility which is permitted pursuant to Chapter 3 (commencing with Section 44001) of Part 4.

42821. The regulations for major waste tire facility permits shall include, but not be limited to, all of the following:

- (a) Requirements for submission of a detailed operations plan which contains the following components:
  - (1) Fire prevention measures.
  - (2) Fencing and other security measures.
  - (3) Vector control measures.
  - (4) Limits on the size and height of tire piles.
  - (5) A closure plan.
- (b) Requirements for submission of a detailed plan and implementation schedule for the elimination or substantial reduction of existing tire piles using any of the following methods or techniques:
  - (1) Polymer treatment.
  - (2) Rubber reclaiming and crumb rubber production.
  - (3) Pyrolysis.
  - (4) Production of supplemental fuels for cement kilns, lumber operations, or other industrial processes.
  - (5) Tire shredding and transportation to an authorized solid waste landfill.
  - (6) Energy recovery through incineration of whole or shredded tires in accordance with the terms and conditions of a permit issued by an air pollution control district or air quality management district.
  - (7) Other applications determined to be appropriate by the board.
- (c) Requirements for the submission of evidence of financial assurances secured by the operator of the facility that are adequate to cover damage claims arising out of the operation of the facility and that are adequate to cover the cost of closure if that becomes necessary. The financial assurance shall be a trust fund, surety bond, letter of credit, insurance, or other equivalent financial arrangement acceptable to the board.

42830.

- (a) On or before December 1, 1991, the board, in consultation with the State Fire Marshal and the **Office of Environmental Health Hazard Assessment**, shall adopt emergency regulations setting forth the procedures and requirements necessary to obtain a minor waste tire facility permit.
- (b) Regulations adopted pursuant to subdivision (a) shall not require the issuance of a separate permit to a solid waste disposal facility which is permitted pursuant to Chapter 3 (commencing with Section 44001) of Part 4.

42832. The regulations for minor waste tire facility permits shall include, but not be limited to, all of the following:

- (a) Fire prevention measures.
- (b) Vector control measures.
- (c) Other measures determined by the board to be necessary to protect the public health and safety.

## Pesticide Use and Safety

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### Pesticide Illness and Spill Reporting

#### *Health and Safety Code*

105200. Any physician and surgeon who knows, or has reasonable cause to believe, that a patient is suffering from pesticide poisoning or any disease or condition caused by a pesticide shall promptly report that fact to the local health Officer by telephone within 24 hours and by a copy of the report required pursuant to subdivision (a) of Section 6409 of the Labor Code within seven days, except that the information which is available to the physician and surgeon is all that is required to be reported as long as reasonable efforts are made to obtain such information. Each local health officer shall immediately notify the county agricultural commissioner and, at his or her discretion, shall immediately notify the Director of **Environmental Health Hazard Assessment** of each report received and shall report to the Director of Pesticide Regulation, the Director of **Environmental Health Hazard Assessment**, and the Director of Industrial Relations, on a form prescribed by the Director of **Environmental Health Hazard Assessment**, each case reported to him or her pursuant to this section within seven days after receipt of any such report.

The **Office of Environmental Health Hazard Assessment** shall designate a phone number or numbers for use by local health officers in the immediate notification of the **Office** of a pesticide poisoning report. The **Office** shall from time to time establish criteria for use by the local health officers in determining whether the circumstances of a pesticide poisoning warrants the immediate notification of the **Office**. In no case shall the treatment administered for pesticide poisoning or a condition suspected as pesticide poisoning be deemed to be first aid treatment.

Any physician and surgeon who fails to comply with the reporting requirements of this section or any regulations adopted pursuant to this section shall be liable for a civil penalty of two hundred fifty dollars (\$250). For the purposes of this section, failure to report a case of pesticide poisoning involving one or more employees in the same incident shall constitute a single violation. The Division of Occupational Safety and Health of the Department of Industrial Relations shall enforce these provisions by issuance of a citation and notice of civil penalty in a manner consistent with Section 6317 of the Labor Code. Any physician and surgeon who receives a citation and notice of civil penalty may appeal to the Occupational Safety and Health Appeals Board in a manner consistent with Section 6319 of the Labor Code.

Each local health officer shall maintain the ability to receive and investigate reports of pesticide poisoning at all times pursuant to Section 12982 of the Food and Agricultural Code.

105205. The **Office of Environmental Health Hazard Assessment** shall develop and implement, in cooperation with local health officers and state and local medical associations, a program of medical education [Medical Supervision Program] to alert physicians and other health care professionals to the symptoms, diagnosis, treatment, and reporting of pesticide poisoning.

105210. After consultation with the county agricultural commissioner or the Director of Agriculture, the local health officer may, upon his determination that pesticide poisoning is serious and that an outbreak in pesticide poisoning or any disease or condition caused by pesticide poisoning has occurred in his county, request assistance by the state department. Upon such request, the director shall provide the local health

officer with the necessary staff and technical assistance to conduct an epidemiologic investigation of the outbreak, and where appropriate, shall make recommendation to control or prevent such poisoning outbreaks.

105215. Any public employee, as defined in Section 811.4 of the Government Code, whose responsibilities include matters relating to health and safety, protection of the environment, or the use or transportation of any pesticide and who knows, or has reasonable cause to believe, that a pesticide has been spilled or otherwise accidentally released, shall promptly notify the local health officer or the notification point specified in the local hazardous materials response plan, where such a plan has been approved by the State Office of Emergency Services and is in operation. The operator of the notification point shall immediately notify the local health officer of the pesticide spill report.

The local health officer shall immediately notify the county agricultural commissioner and, at his or her discretion, shall immediately notify Director of **Environmental Health Hazard Assessment** of each report received. Within seven days after receipt of any report, the local health officer shall notify the Director of Pesticide Regulation, the Director of **Environmental Health Hazard Assessment**, and the Director of Industrial Relations, on a form prescribed by the Director of **Environmental Health Hazard Assessment**, of each case reported to him or her pursuant to this section.

The **Office of Environmental Health Hazard Assessment** shall designate a phone number or numbers for use by local health Officers in the immediate notification of the **Office** of a pesticide spill report. The **Office of Environmental Health Hazard Assessment** shall from time to time establish criteria for use by the local health Officers in determining whether the circumstances of a pesticide spill warrants the immediate notification of the **Office**.

105220. The Director of **Environmental Health Hazard Assessment** shall maintain a file of all the reporting forms received from local health officers pursuant to Section 105215 at the repository of current data on toxic materials established pursuant to Section 147.2 of the Labor Code. The file shall be open to the public and shall be indexed at least to the extent of the following:

- (a) The county of the accidental release.
- (b) The type of pesticide involved.

105225. Each public employer of a public employee subject to Section 105215 shall post in one or more prominent places frequented by such employee a notice informing such employee of the responsibility imposed by Section 105215.

### ***Food and Agricultural Code***

12982. The director and the commissioner of each county under the direction and supervision of the director, shall enforce the provisions of this article and the regulations adopted pursuant to it. The local health officer may assist the director and the commissioner in the enforcement of the provisions of this article and any regulations adopted pursuant to it. The local health officer shall investigate any condition where a health hazard from pesticide use exists, and shall take necessary action, in cooperation with the commissioner, to abate any such condition. The local health officer may call upon the **Office of Environmental Health Hazard Assessment** for assistance pursuant to the provisions of Section 105210 of the Health and Safety Code.

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## Risk Assessment

### *Food and Agricultural Code (as cited in GRP-1)*

11454. The department [of Pesticide Regulation] succeeds to, and is vested with, all the duties, powers, purposes, responsibilities, and jurisdiction of the Department of Food and Agriculture relating to the regulation of pesticides. The powers, functions, and responsibilities of the department shall include, but not be limited to, the following:

- (a) The functions and responsibilities set forth in this division.
- (b) The functions and responsibilities set forth in Chapter 1 (commencing with Section 12501), Chapter 2 (commencing with Section 12751) excepting Article 2.5 (commencing with Section 12786), Chapter 3 (commencing with Section 14001), Chapter 3.5 (commencing with Section 14101), Chapter 3.6 (commencing with Section 14151), and Chapter 7 (commencing with Section 15201) of Division 7.

11454.1. The Department of Pesticide Regulation shall conduct pesticide risk assessments as appropriate to carry out its responsibilities set forth in Section 11454. The **Office of Environmental Health Hazard Assessment** shall provide scientific peer review of risk assessments conducted by the department as appropriate to carry out its responsibilities set forth in Section 59004 of the Health and Safety Code.

### *Food and Agricultural Code*

13121. This article shall be known and may be cited as the Birth Defect Prevention Act of 1984.

13122. It is the purpose of the Legislature in enacting this chapter to prevent pesticide induced abortions, birth defects, and infertility.

13123. For purposes of this chapter, the following terms mean:

- (a) "Adverse reproductive effect" means a statistically significant adverse effect on parental reproductive performance and the growth and development of offspring, including gonadal function, conception, and parturition; abortions; birth defects; stillbirths; and resorptions.
- (b) "Data gap" means that the department does not have on file a full set of valid mandatory health effects studies.
- (c) "Mandatory health effects study" means adverse reproductive effect, chronic toxicity, mutagenicity, neurotoxicity, oncogenicity, and teratogenicity studies required for full registration or licensing of pesticides in California, as of July 1, 1983.
- (d) "Teratogenic" means the property of a substance or mixture of substances to produce or induce functional deviations or developmental anomalies, not heritable, in or on an animal embryo or fetus.
- (e) "Mutagenic effect" means the property of a substance or mixture of substances to induce changes in the genetic complement of either somatic or germinal tissue in subsequent generations.
- (f) "Chronic toxicity" means the property of a substance or mixture of substances to cause adverse effects in an organism upon repeated or continuous exposure over a period of at least one-half the lifetime of that organism.
- (g) "Oncogenic" means the property of a substance or a mixture of substances to produce or induce benign or malignant tumor formations in living animals.
- (h) "Neurotoxic effect" means any adverse effect on the nervous system such as delayed-onset

locomotor ataxia resulting from single administration of the test substance, repeated once if necessary.

- (i) "Initiation" means that the mandatory health effects study or any necessary preliminary studies, such as pilot studies or range finding studies, have been commenced.
- (j) "Data generator" means a person who has completed and filed with the director a data commitment status report.
- (k) "Completion" means that the study has been finished, the data has been analyzed, and the final report of the results, including all exhibits, has been prepared and submitted to the department.
- (l) "Submitted" means deliverance of a completed study to the department. A study shall be deemed to be submitted until it has been determined by the department to be unacceptable and not capable of being upgraded.
- (m) "Suspend" means the director has issued a notice of intent to suspend the registration of a pesticide product. The director shall issue a suspension order at the earliest possible time.

13123.5. To the extent feasible, health effects studies shall be conducted in accordance with standards and protocols established pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Sec. 135 et seq.).

13124. The department shall report all of the following to the Legislature:

- (a) By April 1, 1985, a list of pesticide active ingredients currently registered in California.
- (b) By April 1, 1985, a list of the department's mandatory health effects study requirements for full registration of pesticides in California as of July 1, 1983.
- (c) By July 1, 1985, a list of mandatory health effects studies on file at the department for each pesticide active ingredient.

13125. Not later than December 31, 1985, the department shall report the following information for each active pesticide ingredient presently registered in California:

- (a) The department's determination of whether each of the studies specified in Section 13124 is valid, complete, and adequate. This determination shall be based on a thorough evaluation of the studies, but does not require an onsite audit of the laboratory that produced the study.
- (b) A list of data gaps for each active pesticide ingredient.
- (c) The department's determination of whether each study shows adverse reproductive effects, chronic toxicity, mutagenic effects, neurotoxic effects, oncogenic effects, or teratogenic effects.
- (d) For each active pesticide ingredient for which an effect described in subdivision (c) has been shown, or a data gap exists, a list of the amount sold in California during 1985, and whether this active ingredient is sold for home or agricultural use.
- (e) If all of the data cannot be acquired by the department by the reporting deadline established by this section, the department shall report the data available, and provide a supplemental report with the remaining data by April 1, 1986.

13126. No new active pesticide ingredient shall be conditionally registered or licensed when any of the mandatory health effects studies, as defined in subdivision (c) of Section 13123, is missing, incomplete, or of questionable validity unless the registration is based on previous consultation with the **Office of Environmental Health Hazard Assessment** and the Director of Industrial Relations.



13127.

- (a) Not later than December 31, 1985, the department shall identify 200 pesticide active ingredients which the department determines have the most significant data gaps and widespread use and which are suspected to be hazardous to people. Not later than 30 days after the report issued pursuant to Section 13125, the department shall notify each registrant of a pesticide product containing any of the identified 200 pesticide active ingredients of the applicable data gap required to be filled pursuant to this section.
- (b) Not later than December 31, 1985, the department shall also adopt a timetable for the filling of all data gaps on all pesticide active ingredients, other than those identified by the department pursuant to subdivision (a), which are currently registered or licensed in California. The department shall notify registrants of the applicable data gaps and the scheduled time to initiate and complete studies as provided in the timetable.
- (c) (1) Not later than September 1, 1986, the department shall determine whether a test has been initiated to fill each of the data gaps for each pesticide active ingredient identified in subdivision (a). If no test has been initiated, the department shall fill data gaps in accordance with procedures provided in subparagraph (B) of paragraph (2) of subsection (c) of Section 136a of Title 7 of the United States Code. In order to carry out this section, the director has the same authority to require information from registrants of active pesticide ingredients and to suspend registration that the Administrator of the Environmental Protection Agency has pursuant to subparagraph (B) of paragraph (2) of subsection (c) of Section 136a of Title 7 of the United States Code. If a hearing is requested regarding the proposed suspension of registration, it shall be conducted pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code. On or before July 1, 1986, the director shall, by regulation, prescribe procedures for resolving disputes or funding the filling of data gaps. The procedures may include mediation and arbitration. The arbitration procedures, insofar as practical, shall be consistent with the federal act, or otherwise shall be in accordance with the commercial arbitration rules established by the American Arbitration Association. The procedures shall be established so as to resolve any dispute within the timetable established in subdivision (a).
- (2) The department shall also obtain the data which is identified in subdivision (b), according to the timetable and procedures specified in this section.
- (d) The director shall review the timetable established by the Environmental Protection Agency for the accelerated registration program under amendments effective in 1989 to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Sec. 136 et seq.).
- (e) (1) This section does not apply to any product which the director determines has limited use or that substantial economic hardship would result to users due to unavailability of the product and there is not significant exposure to the public or workers and the product is otherwise in compliance with federal law.
- (2) The director may not, pursuant to this subdivision, exempt all pesticide products containing the same pesticide active ingredient unless it is determined that the pesticide active ingredient has only limited use, there is insignificant exposure to workers or the public, and the products are otherwise in compliance with federal law. Any exemption issued pursuant to this paragraph shall expire at the end of three years after it is issued.
- (f) (1) Whenever the director exercises the authority provided in paragraph (1) of subdivision (e), he or she shall give public notice of the action stating the reasons for exempting the pesticide product from the data requirements of this article. Copies of this notice shall be provided to the appropriate policy committees of the Legislature.

- (2) Whenever the director acts pursuant to paragraph (2) of subdivision (e), the director shall furnish not less than 30 days' public notice of the proposed action, stating the reasons for exempting the pesticide product from the data requirements of this article and allowing public comment thereon. Copies of the notice and the final decision shall be provided to the appropriate policy committees of the Legislature.

13127.2. The director shall, on January 15, 1992, issue a notice of the impending suspension of the registration of any pesticide product containing an active ingredient identified pursuant to subdivision (a) of Section 13127 for which the registrant has not submitted the required data by December 31, 1991. The data generator or registrant may petition the director within 30 days of notification of impending suspension of registration for deferral of the suspension pursuant to Section 13127.3. The director shall act upon such a petition at the earliest possible time and, upon denial of the petition, suspend the registration of each such product.

13127.3.

- (a) The director shall grant an extension of time for submission of the required data if, and only if, the director, with the concurrence of the Secretary for Environmental Protection, makes a finding that both of the following conditions are satisfied:
  - (1) The registrant has submitted at least eight of the mandatory health effects studies, and has initiated the studies required to fill the remaining data gaps by January 15, 1992, unless the registrant can demonstrate to the satisfaction of the director that it failed to have eight studies submitted, and the remaining studies initiated, in accordance with this paragraph because not more than two studies were delayed due to specific, written direction of the department based upon a written evaluation by a department toxicologist.
  - (2) That the registrant has taken appropriate steps to meet the requirements of this article. To determine whether appropriate steps have been taken, the director shall consider the registrant's timely response to data call-ins on other active ingredients contained in products registered with the department pursuant to this article and pursuant to Article 15 (commencing with Section 13141), and whether the registrant has responded in a timely and appropriate manner to notices and correspondence from the department relating to data call-ins and has taken appropriate measures to address study deficiencies identified by the department.
- (b) A registrant shall not be considered to have taken the appropriate steps, as provided in subdivision (a), if the registrant has failed to meet the deadlines established by this article due to efforts to coordinate compliance with federal data requirements.

13127.31. Notwithstanding subdivision (a) of Section 13127.3, if the director finds that delays in submitting the mandatory health effects studies were primarily caused by actions of the department, the director, with the concurrence of the Secretary for Environmental Protection, may extend the deadlines for submitting the mandatory health effects studies for the following active ingredients creosote, pentachlorophenol, dicamba, para-dichlorobenzene, methyl bromide, napropamide, petroleum distillates, and arsenic pentoxide/trioxide.

Registrants of these products shall submit the required studies in a timely manner, but in no case later than the time allowed in Section 13127.92.

13127.32. Notwithstanding any other provision of law, none of the following pesticide products shall remain registered in this state:

- (a) Except as specified in subdivision (b), no pesticide product containing an active ingredient identified pursuant to subdivision (a) of Section 13127 for which the required studies have not been submitted by March 30, 1996, shall remain registered after that date.

- (b) No pesticide product containing methyl bromide or pentachlorophenol for which the required studies have not been submitted by December 31, 1997, shall remain registered after that date.

13127.5.

- (a) The director, with the concurrence of the Secretary for Environmental Protection, may defer the suspension of registration of a pesticide product, as provided in Section 13127.2, if both of the following occur:
  - (1) The director receives a petition from the registrant or any other person requesting a deferral of suspension.
  - (2) The director makes a written finding of one of the following:
    - (A) Suspension of the registration of the product would cause substantial economic hardship to the users of the product, that there would be no significant, unmitigated human exposure to the product, and that no feasible alternatives to the product are available.
    - (B) Suspension of the registration of the product would be more detrimental to the agricultural or nonagricultural environment than continued use of the product, that there would be no significant, unmitigated human exposure to the product, and that no feasible alternatives to the product are available.
    - (C) Suspension of the registration of the product would result in significant risk to the public health and that no feasible alternatives to the product are available.
- (b) The director shall limit the use of any product granted a deferral of suspension pursuant to paragraph (2) of subdivision (a) to specific uses that conform to the director's findings pursuant to paragraph (2) of subdivision (a).

13127.6. The director shall levy a charge on data generators of up to one thousand dollars (\$1,000) per day for each day a data gap continues to exist after the date the director issues a deferral of suspension of registration pursuant to Section 13127.5. In establishing the amount of the charge, the director shall consider the number of outstanding studies, the registrant's timely response to data call-ins on other products registered with the department pursuant to this article, and whether the registrant has responded in a timely and appropriate manner to notices and correspondence from the department relating to data call-ins, and whether the registrant has taken appropriate measures to address study deficiencies identified by the department. If the charge levied on the data generator is not paid, all products containing that active ingredient shall be suspended. Revenues collected from the levying of charges shall be deposited in the Department of Pesticide Regulation Fund.

13127.7. All documentation relevant to a finding made pursuant to Sections 13127.3 and 13127.5 shall be available to the public, and the findings shall be a public record.

13127.8.

- (a) A suspension of registration of a pesticide product containing any of the active ingredients identified pursuant to subdivision (a) of Section 13127 shall be revoked when the director determines that the registrant has submitted all of the mandatory health effects studies. If, upon completion of the review of the studies, the director determines that a data gap still exists, the director shall suspend the registration.
- (b) If at any time after January 1, 1992, the registrant meets the requirements of subdivision (a) of Section 13127.3, notwithstanding the date specified in paragraph (1) of subdivision (a) of Section 13127.3, the director shall revoke the suspension, and shall levy a charge pursuant to Section 13127.6 or, if a charge has already been levied on a registrant, the director may revise the charge in light of the registrant's compliance with the requirements of this article and Article 15 (commencing with Section 13141).

- (c) The director may modify the amount of the charge levied pursuant to Section 13127.6 upon the initiation or submission of any health effects studies required pursuant to this article.

13127.9. For each mandatory health effects study that is required for each active ingredient identified pursuant to subdivision (a) of Section 13127, the registrant shall submit to the department a progress report in December of each year until the study is completed.

13127.91. The director shall suspend the registration of any pesticide product that contains an active ingredient identified pursuant to subdivision (a) of Section 13127 for which the registrant fails to do any of the following:

- (a) Respond to the director's notification of a data gap.
- (b) Submit progress reports as required by Section 13127.9.
- (c) Demonstrate reasonable progress toward completion of all the mandatory health effects studies.

13127.92.

- (a) Extensions of time granted pursuant to Section 13127.3, 13127.31, and 13127.5 shall only be for the time necessary to complete the mandatory health effects studies.
- (b) Mandatory health effects studies shall be completed in accordance with the following timetable:
  - (1) Forty-eight months for oncogenicity, chronic feeding, and reproduction studies.
  - (2) Twenty-four months for teratogenicity and neurotoxicity studies.
  - (3) Twelve months for mutagenicity studies.
- (c) A deferral of suspension of registration issued pursuant to Section 13127.5 shall be subject to an annual review by the director and shall be limited to the time necessary to complete the required studies, and shall in no case exceed four years with the time tolling from the date that the registrant petitioned for an extension.
- (d) Any extension of time for submission of the mandatory health effects studies granted pursuant to Section 13127.5 shall be canceled by June 15, 1993, and the registration suspended for the affected ingredient, if the registrant fails to initiate the required studies by June 15, 1992.

13128. No applicant for registration or current registrant of a pesticide who proposes to purchase or purchases a registered pesticide from another producer in order to formulate the purchased pesticide into an end use product shall be required pursuant to Section 13127 to submit or cite mandatory health effect data pertaining to the safety of the purchased product or to offer to pay reasonable compensation for the use of any such data if the producer is engaged in fulfilling the requirements of Section 13127.

13129.

- (a) If the director, after evaluation of the health effects study of an active ingredient, finds that a pesticide product containing the active ingredient presents significant adverse health effects, including reproduction, birth defects, or infertility abnormalities, the director shall take cancellation or suspension action against the product pursuant to Section 12825 or 12826.
- (b) The Director of **Environmental Health Hazard Assessment** shall have access to mandatory health effects studies and other health effects studies on file at the Department of Pesticide Regulation, and may, based upon the determination of the Director of **Environmental Health Hazard Assessment**, provide advice, consultation, and recommendations concerning the risks to human health associated with exposure to the substances tested.

13130.3.

- (a) Notwithstanding subdivision (b) of Section 13127, the time permitted by the director for submitting data to fill a data gap shall be as follows:
  - (1) For oncogenicity studies and chronic feeding studies, 48 months.
  - (2) For reproduction studies, 48 months.

- (3) For teratogenicity and neurotoxicity studies, 24 months.
  - (4) For mutagenicity studies, 12 months.
- The time permitted by the director for submitting data to fill a data gap shall commence upon the date the department notifies the registrant of the data gap.
- (b) Notwithstanding the time limit established in subdivision (a) for submitting data to fill a data gap, the department may, with the concurrence of the **Office of Environmental Health Hazard Assessment**, grant an extension of time to complete the required studies, upon a written finding that events beyond the control of the persons responsible for submitting the data prevent submission of the data within the prescribed time, and that those persons have made a good faith effort to complete the studies within the prescribed time. Not more than one extension of time per data requirement may be granted to complete the required studies. The length of an extension granted pursuant to this subdivision shall be limited to the time necessary to complete the studies, not to exceed the length of time specified in subdivision (a) for conducting the studies.

#### 13131.1.

- (a) Not later than March 1, 1992, the director shall notify registrants of the data requirements, and the guidelines the director intends to use in reviewing studies submitted pursuant to subdivision (b) of Section 13127, for all pesticide active ingredients other than those identified pursuant to subdivision (a) of Section 13127.
- (b) Not later than 90 calendar days after the date of notification of the data requirements, each registrant shall do one of the following:
  - (1) Inform the department, in a manner prescribed by the director, of how the registrant will comply with the data requirements.
  - (2) File a written objection, accompanied by any supporting evidence and arguments, to all or part of the director's notice of data requirements. The objection authorized by this paragraph shall be the exclusive opportunity for a registrant to object to the director's notice of data requirements.
- (c) The director may consider and grant a request by a registrant to initiate the studies necessary to comply with the data requirements in accordance with a schedule established by the United States Environmental Protection Agency. In no event shall a registrant be authorized pursuant to this subdivision to initiate the studies necessary for that compliance after January 1, 1994.

#### 13131.2.

- (a) Prior to March 1, 1992, or in response to a written objection filed pursuant to paragraph (2) of subdivision (b) of Section 13131.1, the department may determine, with the concurrence of the **Office of Environmental Health Hazard Assessment**, that one or more of the mandatory health effects studies are not required in order to evaluate pesticide active ingredients other than those identified pursuant to subdivision (a) of Section 13127. This determination may be made only in accordance with one or more of the following criteria:
  - (1) The ingredient has been classified as "Generally Recognized as Safe" by the United States Food and Drug Administration.
  - (2) The study is not physically possible due to the nature of the ingredient.
  - (3) The department has on file toxicological data that is adequate for the assessment of the potential adverse health effects of the ingredient, and the studies relied upon for that purpose are of the same study type, are scientifically valid, and, when taken together, are of a power and sensitivity equivalent to the studies that would be waived pursuant to this subdivision.
- (b) The director may, in conjunction with the **Office of Environmental Health Hazard Assessment**, develop regulations for modification of mandatory health effects studies.

13131.3. If the **Office of Environmental Health Hazard Assessment** does not concur with the determination of the department pursuant to Section 13131.2, the issue shall be decided by a majority of the membership of a panel consisting of the following persons:

- (a) An appointee of the State Director of Health Services who has expertise in toxicology.
- (b) An appointee of the President of the University of California who has expertise in toxicology.
- (c) An appointee of the Secretary for Environmental Protection who has expertise in toxicology.

13131.4.

- (a) On or before January 1, 1994, the director shall issue a final notice of data gaps required to be filled for all pesticide active ingredients other than those identified pursuant to subdivision (a) of Section 13127. This notice shall be the department's final determination of the data gaps required to be filled.
- (b) The time allowed under Section 13130.3 to fill the data gaps shall commence on the date that the final notice of data gaps is issued pursuant to subdivision (a), unless an extension is granted pursuant to subdivision (b) of Section 13130.3.
- (c) Not later than 90 calendar days after the date the final notice of data gaps is issued pursuant to subdivision (a), each registrant shall inform the department, in a manner prescribed by the director, how the registrant will fill the data gap, including a proposed schedule for initiation, completion, and submittal of all required studies.

13131.5. The director shall suspend the registration of any pesticide containing an active ingredient for which the director notifies a registrant pursuant to Section 13131.1 and for which the registrant or data generator, in the judgment of the director, fails to respond appropriately or fails to provide evidence that it is taking appropriate steps to secure the data that are required pursuant to Section 13131.1 or the final notice of data gaps pursuant to Section 13131.4.

13133. If any provision of this article or the application thereof to any person or circumstances is held invalid, this invalidity shall not affect other provisions or applications of the article which can be given effect without the invalid provision or application, and to this end the provisions of this article are severable.

13134.

- (a) Commencing on July 1, 1990, the department, in cooperation with the **Office of Environmental Health Hazard Assessment**, shall conduct an assessment of dietary risks associated with the consumption of produce and processed foods treated with pesticides. This assessment shall integrate adequate data on acute effects and the mandatory health effects studies specified in subdivision (c) of Section 13123, appropriate dietary consumption estimates, and relevant residue data based on the department's and the State Department of Health Services' monitoring data and appropriate field experimental and food technology information to quantify consumer risk. Differences in age, sex, ethnic, and regional consumption patterns shall be considered. The department shall submit each risk assessment to the **Office**, with necessary supporting documentation, for peer review, which shall consider the adequacy of public health protection. The **Office** may provide comments to the department. The department shall formally respond to all of the comments made by the **Office**. The department shall modify the risk assessment to incorporate the comments as deemed appropriate by the director. All correspondence between the department and the **Office** in this matter shall be made available to any person, upon request, pursuant to the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code).
- (b) The department shall consider those pesticides designated for priority food monitoring pursuant to Section 12535 and the results of the department's or the State Department of Health Services' monitoring in establishing priorities for the dietary risk assessments.

- (c) (1) If the department lacks adequate data on the acute effects of pesticide active ingredients or mandatory health effects studies specified in subdivision (c) of Section 13123 necessary to accurately estimate dietary risk, the department shall require the appropriate data to be submitted by the registrant of products whose labels include food uses. This subdivision shall not be construed to affect the time frames established pursuant to Section 13127.
- (2) No applicant for registration, or current registrant, of a pesticide who proposes to purchase or purchases a registered pesticide from another producer in order to formulate the purchased pesticide into an end use product shall be required to submit or cite data pursuant to this section or offer to pay reasonable compensation for the use of any such data if the producer is engaged in fulfilling the data requirements of this section.
- (d) (1) If a registrant fails to submit the data requested by the director pursuant to this section within the time specified by the director, the director shall issue a notice of intent to suspend the registration of that pesticide. The director may include, in the notice of intent to suspend, any provisions that are deemed appropriate concerning the continued sale and use of existing stocks of that pesticide. Any proposed suspension shall become final and effective 30 days from the receipt by the registrant of the notice of intent to suspend, unless during that time a request for hearing is made by a person adversely affected by the notice or the registrant has satisfied the director that the registrant has complied fully with the requirements that served as a basis for the notice of intent to suspend. If a hearing is requested, a hearing shall be conducted pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code. The only matter for resolution at the hearing shall be whether the registrant has failed to take the action that served as the basis for the notice of intent to suspend the registration of the pesticide for which additional data is required and whether the director's determination with respect to the disposition of existing stocks is consistent with this subdivision.
- (2) A hearing shall be held and a determination made within 75 days after receipt of a request for a hearing. The decision rendered after completion of the hearing shall be final. Any registration suspended shall be reinstated by the director if the director determines that the registrant has complied fully with the requirements that served as a basis for the suspension of the registration.
- (e) If the department finds that any pesticide use represents a dietary risk that is deleterious to the health of humans, the department shall prohibit or take action to modify that use or modify the tolerance pursuant to Section 12561, or both, as necessary to protect the public.

13135. The department and the **Office of Environmental Health Hazard Assessment** shall jointly review the existing federal and state pesticide registration and food safety system and determine if the existing programs adequately protect infants and children from dietary exposure to pesticide residues. The review shall commence as early as possible in 1990, so that any policy or administrative adjustments determined to be necessary as a result of the joint review can be made on a timely basis. The department shall consult with the University of California and other qualified public and private entities in conducting the joint review. The joint review shall continue for a sufficient time in order to evaluate the report of infant exposure to pesticide residues, which is presently being undertaken by the National Academy of Sciences. Within six months of the official release of the National Academy of Sciences' study, the department shall finalize a report describing the evaluation that was conducted pursuant to this section, including any recommendations for modification of the existing regulatory system in order to adequately protect infants and children. A copy of this report shall be submitted to the Governor and the Legislature.

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## Worker Health Protection

### *Food and Agricultural Code*

12980. The Legislature hereby finds and declares that it is necessary and desirable to provide for the safe use of pesticides and for safe working conditions for farmworkers, pest control applicators, and other persons handling, storing, or applying pesticides, or working in and about pesticide- treated areas. The Legislature further finds and declares that the development of regulations relating to pesticides and worker safety should be the joint and mutual responsibility of the Department of Pesticide Regulation and the **Office of Environmental Health Hazard Assessment**. The Legislature further finds and declares that, in carrying out the provisions of this article, the University of California, the Department of Industrial Relations, and any other similar institution or agency should be consulted.

12981. The director shall adopt regulations to carry out the provisions of this article. The regulations shall include, but are not limited to, all of the following subjects:

- (a) Restricting worker reentry into areas treated with pesticides determined by the director to be hazardous to worker safety by using either or both of the following:
  - (1) Time limits.
  - (2) Pesticide residue levels on treated plant parts determined by scientific analysis to not be a significant factor in cholinesterase depression or other health effects.

When the director has adopted regulations pursuant to both paragraphs (1) and (2), the person in control of the area treated with the pesticide shall have the option of following regulations adopted pursuant to either paragraph (1) or (2). If the person in control of the area treated with the pesticide chooses to follow regulations adopted pursuant to paragraph (2), the director may establish and charge the person a fee necessary to cover any costs of analysis or costs incurred by the director or commissioner in carrying out regulations adopted pursuant to paragraph (2). The regulations shall include a procedure for the collection of the fee, and the fee shall not exceed actual cost.

- (b) Handling of pesticides.
- (c) Hand washing facilities.
- (d) Farm storage and commercial warehousing of pesticides.
- (e) Protective devices, including, but not limited to, respirators and eyeglasses.
- (f) Posting, in English and Spanish, of fields, areas, adjacent areas or fields, or storage areas.

The **Office of Environmental Health Hazard Assessment** shall participate in the development of any regulations adopted pursuant to this article. Those regulations that relate to health effects shall be based upon the recommendations of the **Office**. The original written recommendations of the **Office**, any subsequent revisions of those recommendations, and the supporting evidence and data upon which the recommendations were based shall be made available upon request to any person.

12982. The director and the commissioner of each county under the direction and supervision of the director, shall enforce the provisions of this article and the regulations adopted pursuant to it. The local health officer may assist the director and the commissioner in the enforcement of the provisions of this article and any regulations adopted pursuant to it. The local health officer shall investigate any condition where a health hazard from pesticide use exists, and shall take necessary action, in cooperation with the commissioner, to abate any such condition. The local health officer may call upon the **Office of Environmental Health Hazard Assessment** for assistance pursuant to the provisions of Section 2951 of the Health and Safety Code.



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## Research: Studies

### *Food and Agricultural Code*

12798.

- (a) The department shall establish a competitive grants program to make funds available to qualified public and private entities to conduct pest management research projects. All of the research related to pest management funded by the department shall be administered pursuant to this program.
- (b) Research conducted pursuant to this section shall have the further development of alternative pest management practices and methods and the further development of pest exclusion detection and eradication methods as priorities. Prior to making research awards, the department shall assess existing research activities and developments in integrated pest management, alternatives to pesticides, and other alternative pest management practices and methods, including, but not limited to, cultural, biological, and biotechnological research.
- (c)
  - (1) The director shall establish a Pest Management Research Committee, which shall award all funds under the competitive grants program.
  - (2) The primary objective of the committee is the further development of pest prevention activities and alternative pest management practices, techniques, and methods which exclude serious pests, as determined by the committee, which detect and quickly eliminate small infestations of foreign pests, and which reduce pesticide use, minimize or eliminate pesticide residues, or result in the use of safer pesticides. In achieving that objective, the committee shall encourage the development and use of biological controls, integrated pest management, biotechnology, cultural, pest prevention, and other alternative pest management methods which are environmentally sound and economically viable.
  - (3) The committee shall consist of 10 persons, who shall serve at the pleasure of the director. The committee shall consist of the following members:
    - (A) Notwithstanding Section 11454, the Director of Food and Agriculture or his or her designee, who shall serve as chairperson.
    - (B) The President of the University of California or his or her designee.
    - (C) The Chancellor of the California State University or his or her designee.
    - (D) Two members who represent the agricultural community, one of whom is an experienced organic farmer and one of whom is knowledgeable and experienced in alternative pest management techniques.
    - (E) Two members who represent pest management researchers, one of whom represents California's public and private colleges and universities and one of whom represents California's independent research community, both of whom are knowledgeable in pest prevention, control, eradication, and pest management.
    - (F) One member who represents public interest organizations, qualified in environmental or public health, or both, and knowledgeable in alternative pest management techniques.
    - (G) One member who represents the **Office of Environmental Health Hazard Assessment**, with experience in public health or toxicology.
    - (H) One member who represents county agricultural commissioners, knowledgeable and experienced in alternative pest management techniques and pest prevention, control, and eradication.
  - (4) The committee shall award funds based upon a competitive application process that meets the eligibility of fulfilling, and has the ability to fulfill, the objectives of this section.

- (5) The approval of research proposals shall be made by a majority vote of the membership of the committee.
- (d) For any proposals funded pursuant to this section, the department shall require reasonable accountability, including performance standards, periodic reports, deadlines, and payments conditioned on compliance with performance standards and deadlines.
- (e) Funding for second and subsequent years of a multiyear award shall be contingent upon satisfactory completion by the grantee of the prior year grant awards.
- (f) In order to facilitate the utilization of pest management practices and methods developed pursuant to this section, the director shall cooperate with qualified public and private entities to provide outreach consultation, information dissemination, and educational services to the agricultural community and other interested parties.

12798.4. The director shall establish a Pest Control Research Screening Committee which shall function as a scientific peer review committee on general pest management research proposals submitted pursuant to Section 12798. The screening committee shall conduct and provide a thorough evaluation of the scientific merit, environmental soundness, and economic viability of each proposal. The committee may circulate research proposals to agricultural commodity groups to obtain information as to the practicality of, and need for, the proposed research. The committee shall meet at the request of the director, and, after reviewing all current proposals, shall make recommendations to the Pest Management Research Committee established pursuant to Section 12798 as to which proposals should be funded. The committee shall consist of the following members:

- (a) Five members who represent California's public and private colleges and universities or private research community, each of whom possesses a degree in either entomology, plant pathology, or environmental studies, and who is knowledgeable, technically qualified, and experienced in pest management research.
- (b) One member who represents the department, with experience in pest management.
- (c) One member who represents the **Office of Environmental Health Hazard Assessment**, with experience in public health or toxicology.
- (d) One member who represents the Department of Food and Agriculture, with experience in pest management.

12798.6. The director shall establish a Pest Science and Technology Screening Committee which shall function as a scientific peer review committee on exotic pest research proposals submitted pursuant to Section 12798. The screening committee shall conduct and provide a thorough evaluation of the scientific merit, environmental soundness, and economic viability of each proposal. The committee shall meet at the request of the director and after reviewing all current proposals shall make recommendations to the Pest Management Research Committee established pursuant to Section 12798 as to which proposals should be funded. The committee shall consist of the following members:

- (a) Five members who represent California's public and private colleges and universities or private research community, each of whom possesses a degree in entomology, plant pathology, or environmental studies, and who are knowledgeable, technically qualified, and experienced in exotic pest biology and pest exclusion, detection, and eradication research.
- (b) One member who represents the department, with experience in pest prevention.
- (c) One member who represents the **Office of Environmental Health Hazard Assessment**, with experience in public health or toxicology.
- (d) One member who represents the Department of Food and Agriculture, with experience in pest prevention.

## Water Quality

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### Safe Drinking Water Act: Public Health Goals

#### *Health and Safety Code*

116293.

- (a) On January 1, 2003, the **Office of Environmental Health Hazard Assessment** shall perform a risk assessment and, based upon that risk assessment, shall adopt a public health goal based exclusively on public health consideration for perchlorate using the criteria set forth in subdivision (c) of Section 116365.
- (b) On or before January 1, 2004, the department shall adopt a primary drinking water standard for perchlorate found in public water systems in California in a manner that is consistent with this chapter.

116361.

- (a) The **Office of Environmental Health Hazard Assessment** shall place a priority on the development of a public health goal for arsenic in drinking water, pursuant to subdivision (c) of Section 116365, sufficient to allow it to adopt the goal no later than December 31, 2002.
- (b) Commencing January 1, 2002, the department shall commence the process for revising the existing primary drinking water standard for arsenic, and shall adopt a revised standard for arsenic not later than June 30, 2004. In considering the technological and economic feasibility of compliance with the proposed standard pursuant to paragraph (3) of subdivision (b) of Section 116365, the department shall consider emerging technologies that may cost-effectively reduce exposure to arsenic in drinking water.
- (c) On or before December 31, 2002, the Secretary for Environmental Protection shall develop language regarding the health effects associated with the ingestion of arsenic in drinking water for inclusion in consumer confidence reports pursuant to Section 116470. On and after July 1, 2003, this language shall be included in the consumer confidence reports mailed or delivered to customers by each water system that measures arsenic in finished water at levels that exceed the applicable public health goal.
- (d) The language developed by the Secretary for Environmental Protection for use in consumer confidence reports to describe the health effects associated with the ingestion of arsenic in drinking water shall be developed in accordance with primacy requirements described in subdivision (e) of Section 141.151 and subsections (b), (c), and (d) of Section 142.12 of Title 40 of the Code of Federal Regulations.
- (e) Nothing in this section affects or changes the date for implementation of a revised arsenic standard by public water systems as required in Parts 9, 141, and 142 of Title 40 of the Code of Federal Regulations.

116365.

- (a) The department shall adopt primary drinking water standards for contaminants in drinking water that are based upon the criteria set forth in subdivision (b) and shall not be less stringent than the national primary drinking water standards adopted by the United States Environmental Protection Agency. Each primary drinking water standard adopted by the department shall be set at a level that is as close as feasible to the corresponding public health goal placing primary emphasis on the

protection of public health, and that, to the extent technologically and economically feasible, meets all of the following:

- (1) With respect to acutely toxic substances, avoids any known or anticipated adverse effects on public health with an adequate margin of safety, and
  - (2) With respect to carcinogens, or any substances that may cause chronic disease, avoids any significant risk to public health.
- (b) The department shall consider all of the following criteria when it adopts a primary drinking water standard:
- (1) The public health goal for the contaminant published by the **Office of Environmental Health Hazard Assessment** pursuant to subdivision (c).
  - (2) The national primary drinking water standard for the contaminant, if any, adopted by the United States Environmental Protection Agency.
  - (3) The technological and economic feasibility of compliance with the proposed primary drinking water standard. For the purposes of determining economic feasibility pursuant to this paragraph, the department shall consider the costs of compliance to public water systems, customers, and other affected parties with the proposed primary drinking water standard, including the cost per customer and aggregate cost of compliance, using best available technology.
- (c) (1) The **Office of Environmental Health Hazard Assessment** shall prepare and publish an assessment of the risks to public health posed by each contaminant for which the department proposes a primary drinking water standard. The risk assessment shall be prepared using the most current principles, practices, and methods used by public health professionals who are experienced practitioners in the fields of epidemiology, risk assessment, and toxicology. The risk assessment shall contain an estimate of the level of the contaminant in drinking water that is not anticipated to cause or contribute to adverse health effects, or that does not pose any significant risk to health. This level shall be known as the public health goal for the contaminant. The public health goal shall be based exclusively on public health considerations and shall be set in accordance with all of the following:
- (A) If the contaminant is an acutely toxic substance, the public health goal shall be set at the level at which no known or anticipated adverse effects on health occur, with an adequate margin of safety.
  - (B) If the contaminant is a carcinogen or other substance that may cause chronic disease, the public health goal shall be set at the level that, based upon currently available data, does not pose any significant risk to health.
  - (C) To the extent information is available, the public health goal shall take into account each of the following factors:
    - (i) Synergistic effects resulting from exposure to, or interaction between, the contaminant and one or more other substances or contaminants.
    - (ii) Adverse health effects the contaminant has on members of subgroups that comprise a meaningful portion of the general population, including, but not limited to, infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subgroups that are identifiable as being at greater risk of adverse health effects than the general population when exposed to the contaminant in drinking water.
    - (iii) The relationship between exposure to the contaminant and increased body burden and the degree to which increased body burden levels alter physiological function or structure in a manner that may significantly increase the risk of illness.
    - (iv) The additive effect of exposure to the contaminant in media other than drinking water, including, but not limited to, exposures to the contaminant in food, and in ambient and indoor air, and the degree to which these exposures may contribute to the overall body burden of the contaminant.

- (D) If the **Office of Environmental Health Hazard Assessment** finds that currently available scientific data are insufficient to determine the level of a contaminant at which no known or anticipated adverse effects on health will occur, with an adequate margin of safety, or the level that poses no significant risk to public health, the public health goal shall be set at a level that is protective of public health, with an adequate margin of safety. This level shall be based exclusively on health considerations and shall, to the extent scientific data are available, take into account the factors set forth in clauses (i) to (iv), inclusive, of subparagraph (C), and shall be based on the most current principles, practices, and methods used by public health professionals who are experienced practitioners in the fields of epidemiology, risk assessment, and toxicology. However, if adequate scientific evidence demonstrates that a safe dose response threshold for a contaminant exists, then the public health goal should be set at that threshold. The department may set the public health goal at zero if necessary to satisfy the requirements of this subparagraph.
- (2) The determination of the toxicological endpoints of a contaminant and the publication of its public health goal in a risk assessment prepared by the **Office of Environmental Health Hazard Assessment** are not subject to the requirements of Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The **Office of Environmental Health Hazard Assessment** and the department shall not impose any mandate on a public water system that requires the public water system to comply with a public health goal. The Legislature finds and declares that the addition of this paragraph by the act amending this section during the 1999-2000 Regular Session of the Legislature is declaratory of existing law.
- (3) (A) Beginning July 1, 2001, the **Office of Environmental Health Hazard Assessment** shall, at the time it commences preparation of a risk assessment for a contaminant as required by this subdivision, electronically post on its Internet web page a notice that informs interested persons that it has initiated work on the risk assessment. The notice shall also include a brief description, or a bibliography, of the technical documents or other information the **Office** has identified to date as relevant to the preparation of the risk assessment and inform persons who wish to submit information concerning the contaminant that is the subject of the risk assessment of the name and address of the person in the **Office** to whom the information may be sent, the date by which the information must be received in order for the **Office** to consider it in the preparation of the risk assessment, and that all information submitted will be made available to any member of the public who requests it. Until July 1, 2001, the **Office of Environmental Health Hazard Assessment** shall send the notice to interested persons who request it by mail.
- (B) Each draft risk assessment prepared by the **Office of Environmental Health Hazard Assessment** pursuant to this subdivision shall be made available to the public at least 45 calendar days prior to the date that public comment and discussion on the risk assessment are solicited at the public workshop required by Section 57003.
- (C) At the time the **Office of Environmental Health Hazard Assessment** publishes the final risk assessment for a contaminant, the **Office** shall respond in writing to significant comments, data, studies, or other written information submitted by interested persons to the **Office** in connection with the preparation of the risk assessment. Any such comments, data, studies, or other written information submitted to the **Office** shall be made available to any member of the public who requests it.
- (D) Any interested person may, within 15 calendar days of the date the public workshop on a risk assessment is completed pursuant to Section 57003, request the **Office of Environmental Health Hazard Assessment** to submit the risk assessment to external

scientific peer review prior to its publication. If the **Office** receives such a request, the **Office** shall submit the risk assessment to external scientific peer review in a manner substantially equivalent to the external scientific peer review process set forth in Section 57004, if the person requesting the external scientific peer review enters into an enforceable agreement with the **Office** within 15 calendar days of making the request that requires the person requesting the external scientific peer review to fully reimburse the **Office** for all of the costs associated with conducting the external scientific peer review.

- (E) It is the intent of the Legislature that, if the **Office of Environmental Health Hazard Assessment** receives a request to submit a risk assessment prepared for a contaminant to which paragraph (2) of subdivision (e) applies to external scientific review, the peer review shall be conducted in a manner that does not affect the schedule for publishing the public health goal for that contaminant as set forth in paragraph (2) of subdivision (e).
- (d) Notwithstanding any other provision of this section, any maximum contaminant level in effect on August 22, 1995, may be amended by the department to make the level more stringent pursuant to this section. However, the department may only amend a maximum contaminant level to make it less stringent if the department shows clear and convincing evidence that the maximum contaminant level should be made less stringent and the amendment is made consistent with this section.
- (e)
  - (1) All public health goals published by the **Office of Environmental Health Hazard Assessment** shall be established in accordance with the requirements of subdivision (c) and shall be reviewed at least once every five years and revised, pursuant to subdivision (c), as necessary based upon the availability of new scientific data.
  - (2) On or before January 1, 1998, the **Office of Environmental Health Hazard Assessment** shall publish a public health goal for at least 25 drinking water contaminants for which a primary drinking water standard has been adopted by the department. The **Office** shall publish a public health goal for 25 additional drinking water contaminants by January 1, 1999, and for all remaining drinking water contaminants for which a primary drinking water standard has been adopted by the department by no later than December 31, 2001. A public health goal shall be published by the **Office of Environmental Health Hazard Assessment** at the same time the department proposes the adoption of a primary drinking water standard for any newly regulated contaminant.
- (f) The department or **Office of Environmental Health Hazard Assessment** may review, and adopt by reference, any information prepared by, or on behalf of, the United States Environmental Protection Agency for the purpose of adopting a national primary drinking water standard or maximum contaminant level goal when it establishes a California maximum contaminant level or publishes a public health goal.
- (g) At least once every five years after adoption of a primary drinking water standard, the department shall review the primary drinking water standard and shall, consistent with the criteria set forth in subdivisions (a) and (b), amend any standard if any of the following occur:
  - (1) Changes in technology or treatment techniques that permit a materially greater protection of public health or attainment of the public health goal.
  - (2) New scientific evidence that indicates that the substance may present a materially different risk to public health than was previously determined.
- (h) Not later than March 1 of every year, the department shall provide public notice of each primary drinking water standard it proposes to review in that year pursuant to this section. Thereafter, the department shall solicit and consider public comment and hold one or more public hearings regarding its proposal to either amend or maintain an existing standard. With adequate public notice, the department may review additional contaminants not covered by the March 1 notice.

- (i) This section shall operate prospectively to govern the adoption of new or revised primary drinking water standards and does not require the repeal or readoption of primary drinking water standards in effect immediately preceding January 1, 1997.
- (j) The department may, by regulation, require the use of a specified treatment technique in lieu of establishing a maximum contaminant level for a contaminant if the department determines that it is not economically or technologically feasible to ascertain the level of the contaminant.

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## Groundwater Contamination: Pesticides

### *Food and Agricultural Code*

13141. The Legislature finds and declares all of the following:

- (a) It is the right of every citizen in this state to drink safe, potable, wholesome, and pure drinking water.
- (b) The health and economic prosperity of rural communities and individual farm families in the state are threatened by contaminated drinking water supplies because of their proximity to the use of pesticides.
- (c) Pesticide contaminants and other organic chemicals are being found at an ever increasing rate in underground drinking water supplies.
- (d) The United States Environmental Protection Agency has concluded that evidence of relatively localized levels of pesticide pollution should be treated as a warning of more widespread, future contamination.
- (e) Groundwater once polluted cannot be easily cleaned up; thus, there is a considerable potential that groundwater pollution will continue long after actions have been taken to restrict application of the pesticide to land.
- (f) Due to the potential widespread exposure to public drinking water supplies from pesticide applications to the land and the resultant risk to public health and welfare, the potential for pollution of groundwater due to pesticide use must be considered in the registration, renewal, and reregistration process.
- (g) It is the purpose of this article to prevent further pesticide pollution of the groundwater aquifers of this state which may be used for drinking water supplies.

13142. For the purposes of this article, the following definitions apply:

- (a) "Active ingredient" has the same meaning as defined in Section 136 of Title 7 of the United States Code.
- (b) "Agricultural use" has the same meaning as defined in Section 11408.
- (c) "Board" means the State Water Resources Control Board.
- (d) "Chemigation" means a method of irrigation whereby a pesticide is mixed with irrigation water before the water is applied to the crop or to the soil.
- (e) "Degradation product" means a substance resulting from the transformation of a pesticide by physicochemical or biochemical means.
- (f) "Groundwater protection data gap" means that, for a particular pesticide, the director, after study, has been unable to determine that each study required pursuant to subdivision (a) of Section 13143 has been submitted or that each study submitted pursuant to subdivision (a) of Section 13143 is valid, complete, and adequate.
- (g) "Henry's Law constant" is an indicator of the escaping tendency of dilute solutes from water and is approximated by the ratio of the vapor pressure to the water solubility at the same temperature.
- (h) "Pesticide" is defined in Section 12753.
- (i) "Pesticide registrant" means a person that has registered a pesticide pursuant to this chapter.
- (j) "Pollution" means the introduction into the groundwaters of the state of an active ingredient, other specified product, or degradation product of an active ingredient of a pesticide above a level, with an adequate margin of safety, that does not cause adverse health effects.
- (k) "Soil adsorption coefficient" is a measure of the tendency of pesticides, or their biologically active transformation products, to bond to the surfaces of soil particles.



- (l) "Soil microbial zone" means the zone of the soil below which the activity of microbial species is so reduced that it has no significant effect on pesticide breakdown.

13143.

- (a) Not later than December 1, 1986, a person that has registered an economic poison in California for agricultural use shall submit to the director the information prescribed in this subdivision. The information shall be submitted for each active ingredient in each economic poison registered. The registrant shall submit all of the following information:
- (1) Water solubility.
  - (2) Vapor pressure.
  - (3) Octanol-water partition coefficient.
  - (4) The soil adsorption coefficient.
  - (5) Henry's Law constant.
  - (6) Dissipation studies, including hydrolysis, photolysis, aerobic and anaerobic soil metabolism, and field dissipation, under California or similar environmental use conditions.
  - (7) Any additional information the director determines is necessary.
- (b) The director also may require the information prescribed in subdivision (a) for other specified ingredients and degradation products of an active ingredient in any economic poison. The director shall also require this information when the State Department of Health Services, the **Office of Environmental Health Hazard Assessment**, or the board submits a written request for the information to the director, if the State Department of Health Services, the **Office of Environmental Health Hazard Assessment**, or the board specifies the reasons why they consider the information necessary. The director shall deny the request upon a written finding that, based on available scientific evidence, the request would not further the purposes of this article.
- (c) All information submitted pursuant to subdivision (a) shall be presented in English and summarized in tabular form on no more than three sheets of paper with the actual studies, including methods and protocols attached. All information shall, at a minimum, meet the testing methods and reporting requirements provided by the Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision D Series 60 to 64, inclusive, for product chemistry and Subdivision N Series 161 to 164, inclusive, for environmental fate, including information required for degradation products in specific studies. With prior approval from the director, registrants may use specified alternative protocols as permitted by the <<-United States->> Environmental Protection Agency guidelines, if the director finds use of the protocol is consistent with, and accomplishes the objectives of, this article. Studies conducted on active ingredients in the formulation of economic poisons shall meet the same testing methods as required for studies conducted on active ingredients. The department, in consultation with the board, may, in addition, require specified testing protocols that are specific to California soil and climatic conditions. The director may give a pesticide registrant an extension of up to two years if it determines that this additional time is necessary and warranted to complete the studies required in paragraph (6) of subdivision (a). No extension of the deadline for these studies shall go beyond December 1, 1989. When seeking the extension, the registrant shall submit to the director a written report on the current status of the dissipation studies for which the extension is being sought. For registrants granted an extension pursuant to this section, Section 13145 shall be effective upon the completion date established by the director.
- (d) The director may grant the registrant an extension beyond the one authorized in subdivision (c), if all of the following conditions are met:
- (1) The registrant submits a written request to the director for an extension beyond the one granted pursuant to subdivision (c). The request shall include the reasons why the extension is necessary and the findings produced by the study up to the time the request is made.
  - (2) The director finds that the registrant has made every effort to complete the studies required in paragraph (6) of subdivision (a) within the required time limits of the extension granted

- pursuant to subdivision (c) and that those studies could not be completed within the required time limits due to circumstances beyond the control of the registrant.
- (3) The director establishes a final deadline, not to exceed one year beyond the time limit of the extension granted pursuant to subdivision (c), and a schedule of progress by which the registrant shall complete the studies required in paragraph (6) of subdivision (a).
  - (e) After December 1, 1986, no registration of any new economic poison shall be granted unless the applicant submits all of the information required by the director pursuant to this article and the director finds that the information meets the requirements of this article.

13144.

- (a) Not later than December 1, 1986, the department shall establish specific numerical values for water solubility, soil adsorption coefficient (Koc), hydrolysis, aerobic and anaerobic soil metabolism, and field dissipation. The values established by the department shall be at least equal to those established by the Environmental Protection Agency. The department may revise the numerical values when the department finds that the revision is necessary to protect the groundwater of the state. The numerical values established or revised by the department shall always be at least as stringent as the values being used by the Environmental Protection Agency at the time the values are established or revised by the department.
- (b) Not later than December 1, 1987, and annually thereafter, the director shall report the following information to the Legislature, the **Office of Environmental Health Hazard Assessment**, and the board for each economic poison registered for agricultural use:
  - (1) A list of each active ingredient, other specified ingredient, or degradation product of an active ingredient of an economic poison for which there is a groundwater protection data gap.
  - (2) A list of each economic poison that contains an active ingredient, other specified ingredients, or degradation product of an active ingredient which is greater than one or more of the numerical values established pursuant to subdivision (a), or is less than the numerical value in the case of soil adsorption coefficient, in both of the following categories:
    - (A) Water solubility or soil adsorption coefficient (Koc).
    - (B) Hydrolysis, aerobic soil metabolism, anaerobic soil metabolism, or field dissipation.
  - (3) For each economic poison listed pursuant to paragraph (2) for which information is available, a list of the amount sold in California during the most recent year for which sales information is available and where and for what purpose the economic poison was used, when this information is available in the pesticide use report.
- (c) The department shall determine, to the extent possible, the toxicological significance of the degradation products and other specified ingredients identified pursuant to paragraph (2) of subdivision (b).

13148.

- (a) In order to more accurately determine the mobility and persistence of the economic poisons identified pursuant to paragraph (2) of subdivision (b) of Section 13144 and to determine if these economic poisons have migrated to groundwaters of the state, the director shall conduct soil and groundwater monitoring statewide in areas of the state where the economic poison is primarily used or where other factors identified pursuant to Section 13143 and subdivision (b) of Section 13144, including physicochemical characteristics and use practices of the economic poisons, indicate a probability that the economic poison may migrate to the groundwaters of the state. The monitoring shall commence within one year after the economic poison is placed on the Groundwater Protection List and shall be conducted in accordance with standard protocol and testing procedures established pursuant to subdivision (b). Monitoring programs shall replicate conditions under which the economic poison is normally used in the area of monitoring. In developing a monitoring program, the director shall coordinate with other agencies that conduct soil and groundwater monitoring.

- (b) Within 90 days after an economic poison is placed on the Groundwater Protection List pursuant to subdivision (d) of Section 13145, the director, in consultation with the board, shall develop a standard protocol and testing procedure for each economic poison identified pursuant to subdivision (d) of Section 13145.
- (c) The director shall report all monitoring results to the State Department of Health Services, the **Office of Environmental Health Hazard Assessment**, and the board.

13150. The director may allow the continued registration, sale, and use of an economic poison which meets any one of the conditions specified in Section 13149 if all of the following conditions are met:

- (a) The registrant submits a report and documented evidence which demonstrate both of the following:
  - (1) That the presence in the soil of any active ingredient, other specified ingredient, or degradation product does not threaten to pollute the groundwaters of the state in any region within the state in which the economic poison may be used according to the terms under which it is registered.
  - (2) That any active ingredient, other specified ingredient, or degradation product that has been found in groundwater has not polluted, and does not threaten to pollute, the groundwater of the state in any region within the state in which the economic poison may be used according to the terms under which it is registered.
- (b) A subcommittee of the director's pesticide registration and evaluation committee, consisting of one member each representing the director, the **Office of Environmental Health Hazard Assessment**, and the board, holds a hearing, within 180 days after it is requested by the registrant, to review the report and documented evidence submitted by the registrant and any other information or data which the subcommittee determines is necessary to make a finding.
- (c) The subcommittee, within 90 days after the hearing is conducted, makes any of the following findings and recommendations:
  - (1) That the ingredient found in the soil or groundwater has not polluted and does not threaten to pollute the groundwaters of the state.
  - (2) That the agricultural use of the economic poison can be modified so that there is a high probability that the economic poison would not pollute the groundwaters of the state.
  - (3) That modification of the agricultural use of the economic poison pursuant to paragraph (2) or cancellation of the economic poison will cause severe economic hardship on the state's agricultural industry, and that no alternative products or practices can be effectively used so that there is a high probability that pollution of the groundwater of the state will not occur. The subcommittee shall recommend a level of the economic poison that does not significantly diminish the margin of safety recognized by the subcommittee to not cause adverse health effects. When the subcommittee makes a finding pursuant to paragraph (2) or (3), it shall determine whether the adverse health effects of the economic poison are carcinogenic, mutagenic, teratogenic, or neurotoxic.
- (d) The director, within 30 days after the subcommittee issues its findings, does any of the following:
  - (1) Concurs with the subcommittee finding pursuant to paragraph (1) of subdivision (c) of Section 13149.
  - (2) Concurs with the subcommittee finding pursuant to paragraph (2) of subdivision (c) of Section 13149, and adopts modifications that result in a high probability that the economic poison would not pollute the groundwaters of the state.
  - (3) Concurs with the subcommittee findings pursuant to paragraph (3) of subdivision (c), or determines that the subcommittee finding pursuant to paragraph (2) of subdivision (c) will cause severe economic hardship on the state's agricultural industry. In either case, the director shall adopt the subcommittee's recommended level or shall establish a different level, provided the level does not significantly diminish the margin of safety to not cause adverse health effects.

- (4) Determines that, contrary to the finding of the subcommittee, no pollution or threat to pollution exists. The director shall state the reasons for his or her decisions in writing at the time any action is taken, specifying any differences with the subcommittee's findings and recommendations. The written statement shall be transmitted to the appropriate committees of the Senate and Assembly, the State Department of Health Services, the **Office of Environmental Health Hazard Assessment**, and the board. When the director takes action pursuant to paragraph (2) or (3), he or she shall determine whether the adverse health effects of the economic poison are carcinogenic, mutagenic, teratogenic, or neurotoxic.

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## Coastal Monitoring

### *Water Code*

13177.

- (a) It is the intent of the Legislature that the state board continue to implement the California State Mussel Watch Program.
- (b) The Legislature finds and declares that the California State Mussel Watch Program provides the following benefits to the people of the state:
  - (1) An effective method for monitoring the long-term effects of certain toxic substances in selected fresh, estuarine, and marine waters.
  - (2) An important element in the state board's comprehensive water quality monitoring strategy.
  - (3) Identification, on an annual basis of specific areas where concentrations of toxic substances are higher than normal.
  - (4) Valuable information to guide the state and regional boards and other public and private agencies in efforts to protect water quality.
- (c) To the extent funding is appropriated for this purpose, the state board, in conjunction with the Department of Fish and Game, shall continue to implement the long-term coastal monitoring program known as the California State Mussel Watch Program. The program may consist of, but is not limited to, the following elements:
  - (1) removal of mussels, clams, and other aquatic organisms from relatively clean coastal sites and placing them in sampling sites. For purposes of this section, "sampling sites" means selected waters of concern to the state board and the Department of Fish and Game.
  - (2) After specified exposure periods at the sampling sites, removal of the aquatic organisms for analysis.
  - (3) Laboratory analysis of the removed aquatic organisms to determine the amounts of various toxic substances that may have accumulated in the bodies of the aquatic organisms.
  - (4) Making available both the short- and long-term results of the laboratory analysis to appropriate public and private agencies and the public.

13177.5.

- (a) The state board, in consultation with the **Office of Environmental Health Hazard Assessment**, shall develop a comprehensive coastal monitoring and assessment program for sport fish and shellfish, to be known as the Coastal Fish Contamination Program. The program shall identify and monitor chemical contamination in coastal fish and shellfish and assess the health risks of consumption of sport fish and shellfish caught by consumers.
- (b) The state board shall consult with the Department of Fish and Game, the **Office of Environmental Health Hazard Assessment**, and regional water quality control boards with jurisdiction over territory along the coast, to determine chemicals, sampling locations, and the species to be collected under the program. The program developed by the state board shall include all of the following:
  - (1) Screening studies to identify coastal fishing areas where fish species have the potential for accumulating chemicals that pose significant health risks to human consumers of sport fish and shellfish.
  - (2) The assessment of at least 60 screening study monitoring sites and 120 samples in the first five years of the program and an assessment of additional screening study sites as time and resources permit.

- (3) Comprehensive monitoring and assessment of fishing areas determined through screening studies to have a potential for significant human health risk and a reassessment of these areas every five years.
- (c) Based on existing fish contamination data, the state board shall designate a minimum of 40 sites as fixed sampling locations for the ongoing monitoring effort.
- (d) The state board shall contract with the **Office of Environmental Health Hazard Assessment** to prepare comprehensive health risk assessments for sport fish and shellfish monitored in the program. The assessments shall be based on the data collected by the program and information on fish consumption and food preparation. The **Office of Environmental Health Hazard Assessment**, within 18 months of the completion of a comprehensive study for each area by the state board, shall submit to the board a draft health risk assessment report for that area. Those health risk assessments shall be updated following the reassessment of areas by the board.
- (e) The **Office of Environmental Health Hazard Assessment** shall issue health advisories when the **Office** determines that consuming certain fish or shellfish presents a significant health risk. The advisories shall contain information for the public, and particularly the population at risk, concerning health risks from the consumption of the fish or shellfish. The **Office** shall notify the appropriate county health officers, the State Department of Health Services, and the Department of Fish and Game, prior to the issuance of a health advisory. The notification shall provide sufficient information for the purpose of posting signage. The **Office** shall urge county health officers to conspicuously post health warnings in areas where contaminated fish or shellfish may be caught including piers, commercial passenger fishing vessels, and shore areas where fishing occurs. The Department of Fish and Game shall publish the **Office's** health warnings in its Sport Fishing Regulations Booklet.

13177.6. To the extent funding is appropriated for this purpose, the state board, in consultation with the Department of Fish and Game and **Office of Environmental Health Hazard Assessment**, shall perform a monitoring study to reassess the geographic boundaries of the commercial fish closure off the Palos Verdes Shelf. The reassessment shall include collection and analysis of white croaker caught on the Palos Verdes Shelf, within three miles south of the Shelf, and within San Pedro Bay. Based on the results of the reassessment, the Department of Fish and Game, with guidance from the **Office of Environmental Health Hazard Assessment**, shall redelineate, if necessary, the commercial fish closure area to protect the health of consumers of commercially caught white croaker. The sample collection and analysis shall be conducted within 18 months of the enactment of this section and the reassessment of the health risk shall be conducted within 18 months of the completion of the analysis of the samples.

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## Bays and Estuaries

### *Water Code*

13181.

- (a) For the purposes of this section, the following terms have the following meanings:
  - (1) "Coastal waters" means waters within the area bounded by the mean high tide line to the three-mile state waters limit, from the Oregon to the Mexican borders.
  - (2) "Coastal watersheds" means the watersheds of tributary waters that drain to the ocean and significantly influence coastal water quality.
- (b) (1) To the extent that funds are available for that purpose, the state board shall prepare and complete on or before January 1, 2000, an inventory of existing water quality monitoring activities within state coastal watersheds, bays, estuaries, and coastal waters. The information generated by preparing the inventory shall be made available as a report, and as an Internet-based index, that is available to the general public. A summary of the results shall be made available to the Legislature. The inventory shall include, but not be limited to, descriptions of all of the following:
  - (A) The sources of monitoring data, including federal, state, and local governments, the private sector, citizen groups, and nonprofit organizations.
  - (B) The monitoring methods being used by these sources.
  - (C) The location of the monitoring sites.
  - (D) Existing efforts to investigate the discharge of nonvolatile organic pollutants, including trace metals and nontarget organic chemicals, through storm drains into Santa Monica Bay, San Francisco Bay, Humboldt Bay, and San Diego Bay.
- (2) Notwithstanding any other provision of law, the state board shall carry out paragraph (1) by contracting with institutions with expertise in coastal water quality monitoring, which may include the Southern California Coastal Water Research Project and the San Francisco Estuary Institute, to undertake the inventory.
- (c) (1) To the extent that funds are available for that purpose, the state board, not later than January 1, 2001, shall prepare and submit to the Legislature a report that proposes the implementation of a comprehensive program to monitor the quality of state coastal watersheds, bays, estuaries, and coastal waters and their marine resources for pollutants, including, but not limited to, bacteria and viruses, petroleum hydrocarbons, heavy metals, and pesticides, as defined in Section 12753 of the Food and Agricultural Code. The proposed program shall utilize information available through the sources identified in paragraph (1) of subdivision (b), as appropriate, and shall avoid the duplication of existing and ongoing monitoring efforts to the extent feasible. The proposed program shall include, but not be limited to, all of the following:
  - (A) To the extent possible, a determination regarding the extent to which existing water quality objectives, sediment quality guidelines, tissue contaminant burden guidelines, and health standards are being met. Where information is not available to make this determination, the report shall identify methods for determining this information.
  - (B) To the extent possible, a determination regarding the sources of pollution in areas where objectives, standards, and guidelines are not being met. Where information is not available to make this determination, the report shall identify methods for determining this information.

- (C) Methods for determining the degree of improvement or degradation in coastal water quality over time with respect to these objectives, guidelines, and standards.
  - (D) To the extent possible, estimates of the total discharges of pollutants into state coastal watersheds, bays, estuaries, and coastal waters from all sources.
  - (E) Standard protocols for sampling and data collection methods, to maximize the usefulness of the data resulting from the program.
  - (F) Recommendations for a standard format for reporting monitoring results to maximize access to and use of the data.
  - (G) The estimated costs of implementing the program and the proposed schedule of implementation.
  - (H) A description of the method by which the state board shall provide biennial reporting to the public on water quality within the state's coastal watersheds, bays, estuaries, and coastal waters, and recommended actions that should be undertaken to maintain and improve water quality in those areas.
  - (I) A description of the method by which the state board shall develop a system for monitoring mass contaminant discharges, including, but not limited to, heavy metals, PCBs, PAHs, and pesticides from storm water at the point of discharge. The system shall provide for the appropriate frequency of monitoring for each specific contaminant. The system shall be designed to identify the relative contribution of contaminants in storm water to the overall anthropogenic discharges into near coastal waters. To the extent possible, the system shall be designed to determine the effectiveness of best management practices in reducing the discharges of contaminants to near coastal waters.
- (2) The state board shall consult with the San Francisco Estuary Institute and the Southern California Coastal Water Research Project to prepare the report. Notwithstanding any other provision of law, the state board may carry out paragraph (1) by contracting with institutions with expertise in coastal water quality monitoring, including, but not limited to, the Southern California Coastal Water Research Project and the San Francisco Estuary Institute, to prepare the report. The state board or its contractors shall convene workshops, symposia, and other professional and scientific meetings for the purpose of developing a consensus on the part of regulatory agencies and dischargers with regard to the appropriate methods to be used to monitor water quality on a statewide basis.
- (d) The state board shall not use more than 5 percent of the funds allocated to implement subdivisions (b) and (c) for the administrative costs of the contracts permitted under those provisions.

13191.

- (a) The state board shall convene an advisory group or groups to assist in the evaluation of program structure and effectiveness as it relates to the implementation of the requirements of Section 303(d) of the Clean Water Act (33 U.S.C. 1313(d)), and applicable federal regulations and monitoring and assessment programs. The advisory group or groups shall be comprised of persons concerned with the requirements of Section 303(d) of the Clean Water Act. The state board shall provide public notice on its website of any meetings of the advisory group or groups and, upon the request of any party shall mail notice of the time and location of any meeting of the group or groups. The board shall also ensure that the advisory group or groups meet in a manner that facilitates the effective participation of the public and the stakeholder participants.
- (b) Notwithstanding Section 7550.5 of the Government Code, on or before November 30, 2000, and annually thereafter until November 30, 2002, the state board shall report to the Legislature on the structure and effectiveness of its water quality program as it relates to Section 303(d) of the Clean Water Act. The report may include the information required to be submitted by the board to the United States Environmental Protection Agency pursuant to Section 305 (b) of the Clean Water



Act, and any information required to be submitted to the Legislature pursuant to the Supplemental Report of the Budget Act of 1999. In formulating its report, the state board shall consider any recommendations of the advisory group or groups.

13191.3.

- (a) The state board, on or before July 1, 2003, shall prepare guidelines to be used by the state board and the regional boards for the purpose of listing and delisting waters and developing and implementing the total maximum daily load (TMDL) program and total maximum daily loads pursuant to Section 303(d) of the federal Clean Water Act (33 U.S.C. Sec. 1313(d)).
- (b) For the purposes of preparing the guidelines, the state board shall consider the consensus recommendations adopted by the public advisory group convened pursuant to Section 13191.
- (c) The guidelines shall be finalized not later than January 1, 2004.

13390. It is the intent of the Legislature that the state board and the regional boards establish programs that provide maximum protection for existing and future beneficial uses of bay and estuarine waters, and that these programs include a plan for remedial action at toxic hot spots. It is also the intent of the Legislature that these programs further compliance with federal law pertaining to the identification of waters where the protection and propagation of shellfish, fish, and wildlife are threatened by toxic pollutants and contribute to the development of effective strategies to control these pollutants. It is also the intent of the Legislature that these programs be structured and maintained in a manner which allows the state board and the regional boards to make maximum use of any federal funds which may be available for any of the purposes specified in this chapter.

13391.

- (a) The state board shall formulate and adopt a water quality control plan for enclosed bays and estuaries, which shall be known as the California Enclosed Bays and Estuaries Plan, in accordance with the procedures established by this division for adopting water quality control plans.
- (b) As part of its formulation and adoption of the California Enclosed Bays and Estuaries Plan, the state board shall review and update the Water Quality Control Policy for Enclosed Bays and Estuaries of California, as adopted in 1974 pursuant to Article 3 (commencing with Section 13140) of Chapter 3, and incorporate the results of that review and update in the California Enclosed Bays and Estuaries Plan.
- (c) State and regional offices, departments, boards and agencies shall fully implement the California Enclosed Bays and Estuaries Plan. Pending adoption of the California Enclosed Bays and Estuaries Plan by the state board, state and regional offices, departments, boards and agencies shall fully implement the Water Quality Control Policy for Enclosed Bays and Estuaries of California.
- (d) Each regional board shall review and, if necessary, revise waste discharge requirements that are inconsistent with those policies and principles.

13391.5. The definitions in this section govern the construction of this chapter.

- (a) "Enclosed bays" means indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. "Enclosed bays" include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. "Enclosed bays" include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. For the purposes of identifying, characterizing, and ranking toxic hot spots pursuant to this chapter, Monterey Bay and Santa Monica Bay shall also be considered to be enclosed bays.
- (b) "Estuaries" means waters, including coastal lagoons, located at the mouths of streams which serve as mixing zones for fresh and ocean waters. Coastal lagoons and mouths of streams which are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine

waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and sea water. Estuarine waters include, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay Rivers.

- (c) "Health risk assessment" means an analysis which evaluates and quantifies the potential human exposure to a pollutant that bioaccumulates or may bioaccumulate in edible fish, shellfish, or wildlife. "Health risk assessment" includes an analysis of both individual and population wide health risks associated with anticipated levels of human exposure, including potential synergistic effects of toxic pollutants and impacts on sensitive populations.
- (d) "Sediment quality objective" means that level of a constituent in sediment which is established with an adequate margin of safety, for the reasonable protection of the beneficial uses of water or the prevention of nuisances.
- (e) "Toxic hot spots" means locations in enclosed bays, estuaries, or any adjacent waters in the "contiguous zone" or the "ocean," as defined in Section 502 of the Clean Water Act (33 U.S.C. Sec. 1362), the pollution or contamination of which affects the interests of the state, and where hazardous substances have accumulated in the water or sediment to levels which (1) may pose a substantial present or potential hazard to aquatic life, wildlife, fisheries, or human health, or (2) may adversely affect the beneficial uses of the bay, estuary, or ocean waters as defined in water quality control plans, or (3) exceeds adopted water quality or sediment quality objectives.
- (f) "Hazardous substances" has the same meaning as defined in subdivision (h) of Section 25281 of the Health and Safety Code.

13392. The state board and the regional boards, in consultation with the **Office of Environmental Health Hazard Assessment** and the Department of Fish and Game, shall develop and maintain a comprehensive program to (1) identify and characterize toxic hot spots, as defined in Section 13391.5, (2) plan for the cleanup or other appropriate remedial or mitigating actions at the sites, and (3) amend water quality control plans and policies to incorporate strategies to prevent the creation of new toxic hot spots and the further pollution of existing hot spots. As part of this program, the state board and regional boards shall, to the extent feasible, identify specific discharges or waste management practices which contribute to the creation of toxic hot spots, and shall develop appropriate prevention strategies, including, but not limited to, adoption of more stringent waste discharge requirements, onshore remedial actions, adoption of regulations to control source pollutants, and development of new programs to reduce urban and agricultural runoff.

13392.5.

- (a) Each regional board which has regulatory authority for one or more enclosed bays or estuaries shall, by January 1, 1992, develop for each enclosed bay or estuary, a consolidated data base which identifies and describes all known and suspected toxic hot spots. Each regional board shall, in consultation with the state board, also develop an ongoing monitoring and surveillance program that includes, but is not limited to, the following components:
  - (1) Establishment of a monitoring and surveillance task force that includes representation from agencies, including, but not limited to, the **Office of Environmental Health Hazard Assessment** and the Department of Fish and Game, that routinely monitor water quality, sediment, and aquatic life.
  - (2) Suggested guidelines to promote standardized analytical methodologies and consistency in data reporting.
  - (3) Identification of additional monitoring and analyses that are needed to develop a complete toxic hot spot assessment for each enclosed bay and estuary.

- (b) Each regional board shall make available to state and local agencies and the public all information contained in the consolidated data base, as well as the results of new monitoring and surveillance data.

13393.5. On or before July 1, 1992, the state board, in consultation with the **Office of Environmental Health Hazard Assessment** and the Department of Fish and Game, shall adopt general criteria for the assessment and priority ranking of toxic hot spots. The criteria shall take into account the pertinent factors relating to public health and environmental quality, including, but not limited to, potential hazards to public health, toxic hazards to fish, shellfish, and wildlife, and the extent to which the deferral of a remedial action will result or is likely to result in a significant increase in environmental damage, health risks, or cleanup costs.

13395.5. The state board may enter into contracts and other agreements for the purpose of evaluating or demonstrating methods for the removal, treatment, or stabilization of contaminated bottom sediment. For the purpose of preparing health risk assessments pursuant to Section 13393, the state board shall enter into contracts or agreements with the **Office of Environmental Health Hazard Assessment**, or with other state or local agencies, subject to the approval of the **Office**. The costs incurred for work conducted by other state agencies, including, but not limited to, the **Office** and the Department of Fish and Game, pursuant to this chapter shall be reimbursed according to the terms of an interagency agreement between the state board and the agency.

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## Marine and Coastal Resources

### *Public Resources Code*

6230. An amount specified in the annual Budget Act shall be available for distribution for public and private higher education for use as up to two-thirds of the local matching share for projects under the National Sea Grant College and Program Act of 1966 (P.L. 89-688) approved, upon the recommendation of the advisory panel appointed pursuant to Section 6232, by the Secretary of the Resources Agency or the secretary's designee.

6231. There shall be a Sea Grant Advisory Panel consisting of 17 members as provided in Sections 6232, 6233, and 6234. The advisory panel shall do all of the following:

- (a) Review all applications for funding under this section and make recommendations based upon the priorities it establishes.
- (b) Periodically review progress on sea grant research projects subsequent to their approval and funding under this chapter.
- (c) Make recommendations to the Secretary of the Resources Agency with respect to the implementation of this section.

6232. The Secretary of the Resources Agency shall appoint the following members of the advisory panel, who shall serve at the pleasure of the secretary:

- (a) A representative of the Department of Boating and Waterways.
- (b) A representative of the Department of Conservation.
- (c) A representative of the Department of Fish and Game.
- (d) The Executive Director of the California Coastal Commission or the executive director's designee.
- (e) A representative of the fish industry.
- (f) A representative of the aquaculture industry.
- (g) A representative of the ocean engineering industry.
- (h) A representative of the University of California.
- (i) A representative of the California State University.
- (j) A representative of a private California institution of higher education that is participating in the National Sea Grant Program.
- (k) A representative of the State Lands Commission.
- (l) A representative of the **Office of Environmental Health Hazard Assessment**.
- (m) A representative of the State Water Resources Control Board.
- (n) A representative of the Office of Oil Spill Prevention and Response in the Department of Fish and Game, designated by the administrator for oil spill response.

6233.

- (a) The Senate Committee on Rules shall appoint one Member of the Senate to the advisory panel, who shall serve at the pleasure of the Senate Committee on Rules.
- (b) The Speaker of the Assembly shall appoint one Member of the Assembly to the advisory panel, who shall serve at the pleasure of the Speaker. This member shall not be of the same political party as the member appointed by the Senate Committee on Rules.

6234. The Secretary of the Resources Agency, or the secretary's designee shall be a member of the advisory panel and shall serve as chairperson of the advisory panel.

6236. The Sea Grant research projects selected for the state support under this chapter shall have a clearly defined benefit to the people of the State of California. Those projects, to be conducted by universities, colleges, or other institutions participating in the California Sea Grant College Program, shall be applicable to marine and coastal resources management, policy, science, and engineering issues that face this state now or in the reasonably foreseeable future.

6237.

- (a) The Legislature hereby finds and declares that the funding provided by this chapter is needed to stimulate the development and utilization of ocean and coastal resources by working constructively with private sector firms and individuals.
- (b) The Legislature further recognizes the high productivity of the California Sea Grant College Program, the only statewide program systematically devoted to supporting fundamental research, education, and extension activities on the diversity of problems related to marine resources protection and development.

6238. Nothing in this chapter shall be construed to preclude the application for funding of any project that would be eligible for funding under the terms of the National Sea Grant College and Program Act of 1966.

36300. The Ocean Resources Task Force is hereby created in state government. The task force is comprised of the following or their designee: the Secretary for Environmental Protection, the Secretary of the Resources Agency, the Director of Commerce, the Director of **Environmental Health Hazard Assessment**, the Secretary of the Business, Transportation and Housing Agency, the Chairperson or Executive Officer of the State Lands Commission as determined by the commission, the Chairperson or Executive Director of the California Coastal Commission as determined by the commission, the Chairperson or Executive Officer of the State Coastal Conservancy as determined by the conservancy, the Chairperson or Executive Director of the San Francisco Bay Conservation and Development Commission as determined by the commission, the Director of Conservation, the Director of Fish and Game, the Director of Boating and Waterways, the Director of Parks and Recreation, the Chairperson of the Mining and Geology Board, the Chairperson or Executive Director of the State Water Resources Control Board as determined by the board, the Executive Officer of each California regional water quality control board for a coastal region, the Director of Finance, the Chairperson or Executive Director of the State Energy Resources Conservation and Development Commission as determined by the commission, the Chairperson of the State Air Resources Board, the Chairperson of the Senate Committee on Natural Resources and Wildlife, the Chairperson of the Assembly Natural Resources Committee, the President of the University of California, the Chancellor of the California State University, and the Director of the California Sea Grant program.

36301. The chairperson of the task force shall be the Secretary of the Resources Agency, who shall provide all staff support required by the task force. The task force shall meet at the call of the chairperson.

36302. The chairperson of the task force, with advice from the task force, shall appoint the California Ocean Resources Advisory Committee, which, at a minimum, shall consist of the following: representatives of coastal local governments, relevant federal agencies, environmental and interest groups, the Legislature, and relevant industries such as oil and gas, hard minerals, biotechnology, commercial and sportfishing, seafood processing, aquaculture, transportation, tourism, and ports and harbors. The advisory committee shall review the draft of the report and plan of the task force and shall advise the task force in its preparation.

## Consumer Products

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### Proposition 65: Safe Drinking Water and Toxic Enforcement Act of 1986

#### *Health and Safety Code*

25249.5. Prohibition On Contaminating Drinking Water With Chemicals Known to Cause Cancer or Reproductive Toxicity.

No person in the course of doing business shall knowingly discharge or release a chemical known to the state to cause cancer or reproductive toxicity into water or onto or into land where such chemical passes or probably will pass into any source of drinking water, notwithstanding any other provision or authorization of law except as provided in Section 25249.9.

25249.6. Required Warning Before Exposure To Chemicals Known to Cause Cancer Or Reproductive Toxicity.

No person in the course of doing business shall knowingly and intentionally expose any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual, except as provided in Section 25249.10.

25249.7.

- (a) Any person that violates or threatens to violate Section 25249.5 or 25249.6 may be enjoined in any court of competent jurisdiction.
- (b)
  - (1) Any person who has violated Section 25249.5 or 25249.6 shall be liable for a civil penalty not to exceed two thousand five hundred dollars (\$2,500) per day for each violation in addition to any other penalty established by law. That civil penalty may be assessed and recovered in a civil action brought in any court of competent jurisdiction.
  - (2) In assessing the amount of a civil penalty for a violation of this chapter, the court shall consider all of the following:
    - (A) The nature and extent of the violation.
    - (B) The number of, and severity of, the violations.
    - (C) The economic effect of the penalty on the violator.
    - (D) Whether the violator took good faith measures to comply with this chapter and the time these measures were taken.
    - (E) The willfulness of the violator's misconduct.
    - (F) The deterrent effect that the imposition of the penalty would have on both the violator and the regulated community as a whole.
    - (G) Any other factor that justice may require.
- (c) Actions pursuant to this section may be brought by the Attorney General in the name of the people of the State of California, by any district attorney, by any city attorney of a city having a population in excess of 750,000, or, with the consent of the district attorney, by a city prosecutor in any city or county having a full-time city prosecutor, or as provided in subdivision (d).
- (d) Actions pursuant to this section may be brought by any person in the public interest if both of the following requirements are met:
  - (1) The private action is commenced more than 60 days from the date that the person has given notice of an alleged violation of Section 25249.5 or 25249.6 that is the subject of the private action to the Attorney General and the district attorney, city attorney, or prosecutor in whose jurisdiction the violation is alleged to have occurred, and to the alleged violator. If the notice

- alleges a violation of Section 25249.6, the notice of the alleged violation shall include a certificate of merit executed by the attorney for the noticing party, or by the noticing party, if the noticing party is not represented by an attorney. The certificate of merit shall state that the person executing the certificate has consulted with one or more persons with relevant and appropriate experience or expertise who has reviewed facts, studies, or other data regarding the exposure to the listed chemical that is the subject of the action, and that, based on that information, the person executing the certificate believes there is a reasonable and meritorious case for the private action. Factual information sufficient to establish the basis of the certificate of merit, including the information identified in paragraph (2) of subdivision (h), shall be attached to the certificate of merit that is served on the Attorney General.
- (2) Neither the Attorney General, any district attorney, any city attorney, nor any prosecutor has commenced and is diligently prosecuting an action against the violation.
  - (e) Any person bringing an action in the public interest pursuant to subdivision (d) and any person filing any action in which a violation of this chapter is alleged shall notify the Attorney General that the action has been filed. Neither this subdivision nor the procedures provided in subdivisions (f) to (j), inclusive, shall affect the requirements imposed by statute or a court decision in existence on January 1, 2002, concerning whether any person filing any action in which a violation of this chapter is alleged is required to comply with the requirements of subdivision (d).
  - (f)
    - (1) Any person filing an action in the public interest pursuant to subdivision (d), any private person filing any action in which a violation of this chapter is alleged, or any private person settling any violation of this chapter alleged in a notice given pursuant to paragraph (1) of subdivision (d), shall, after the action or violation is subject either to a settlement or to a judgment, submit to the Attorney General a reporting form that includes the results of that settlement or judgment and the final disposition of the case, even if dismissed. At the time of the filing of any judgment pursuant to an action brought in the public interest pursuant to subdivision (d), or any action brought by a private person in which a violation of this chapter is alleged, the plaintiff shall file an affidavit verifying that the report required by this subdivision has been accurately completed and submitted to the Attorney General.
    - (2) Any person bringing an action in the public interest pursuant to subdivision (d), or any private person bringing an action in which a violation of this chapter is alleged, shall, after the action is either subject to a settlement, with or without court approval, or to a judgment, submit to the Attorney General a report that includes information on any corrective action being taken as a part of the settlement or resolution of the action.
    - (3) The Attorney General shall develop a reporting form that specifies the information that shall be reported, including, but not limited to, for purposes of subdivision (e), the date the action was filed, the nature of the relief sought, and for purposes of this subdivision, the amount of the settlement or civil penalty assessed, other financial terms of the settlement, and any other information the Attorney General deems appropriate.
    - (4) If there is a settlement of an action brought by a person in the public interest under subdivision (d), the plaintiff shall submit the settlement, other than a voluntary dismissal in which no consideration is received from the defendant, to the court for approval upon noticed motion, and the court may approve the settlement only if the court makes all of the following findings:
      - (A) Any warning that is required by the settlement complies with this chapter.
      - (B) Any award of attorney's fees is reasonable under California law.
      - (C) Any penalty amount is reasonable based on the criteria set forth in paragraph (2) of subdivision (b).
    - (5) The plaintiff subject to paragraph (4) has the burden of producing evidence sufficient to sustain each required finding. The plaintiff shall serve the motion and all supporting papers on the Attorney General, who may appear and participate in any proceeding without intervening in the case.

- (6) Neither this subdivision nor the procedures provided in subdivision (e) and subdivisions (g) to (j), inclusive, shall affect the requirements imposed by statute or a court decision in existence on the January 1, 2002, concerning whether claims raised by any person or public prosecutor not a party to the action are precluded by a settlement approved by the court.
- (g) The Attorney General shall maintain a record of the information submitted pursuant to subdivisions (e) and (f) and shall make this information available to the public.
- (h) (1) Except as provided in paragraph (2), the basis for the certificate of merit required by subdivision (d) is not discoverable. However, nothing in this subdivision shall preclude the discovery of information related to the certificate of merit if that information is relevant to the subject matter of the action and is otherwise discoverable, solely on the ground that it was used in support of the certificate of merit.
- (2) Upon the conclusion of an action brought pursuant to subdivision (d) with respect to any defendant, if the trial court determines that there was no actual or threatened exposure to a listed chemical, the court may, upon the motion of that alleged violator or upon the court's own motion, review the basis for the belief of the person executing the certificate of merit, expressed in the certificate of merit, that an exposure to a listed chemical had occurred or was threatened. The information in the certificate of merit, including the identity of the persons consulted with and relied on by the certifier, and the facts, studies, or other data reviewed by those persons, shall be disclosed to the court in an in-camera proceeding at which the moving party shall not be present. If the court finds that there was no credible factual basis for the certifier's belief that an exposure to a listed chemical had occurred or was threatened, then the action shall be deemed frivolous within the meaning of Section 128.6 or 128.7 of the Code of Civil Procedure, whichever provision is applicable to the action. The court shall not find a factual basis credible on the basis of a legal theory of liability that is frivolous within the meaning of Section 128.6 or 128.7 of the Code of Civil Procedure, whichever provision is applicable to the action.
- (i) The Attorney General may provide the factual information submitted to establish the basis of the certificate of merit on request to any district attorney, city attorney, or prosecutor within whose jurisdiction the violation is alleged to have occurred, or to any other state or federal government agency, but in all other respects the Attorney General shall maintain, and ensure that all recipients maintain, the submitted information as confidential official information to the full extent authorized in Section 1040 of the Evidence Code.
- (j) In any action brought by the Attorney General, a district attorney, a city attorney, or a prosecutor pursuant to this chapter, the Attorney General, district attorney, city attorney, or prosecutor may seek and recover costs and attorney's fees on behalf of any party who provides a notice pursuant to subdivision (d) and who renders assistance in that action.

#### 25249.8. List Of Chemicals Known to Cause Cancer Or Reproductive Toxicity.

- (a) On or before March 1, 1987, the Governor shall cause to be published a list of those chemicals known to the state to cause cancer or reproductive toxicity within the meaning of this chapter, and he shall cause such list to be revised and republished in light of additional knowledge at least once per year thereafter. Such list shall include at a minimum those substances identified by reference in Labor Code Section 6382(b)(1) and those substances identified additionally by reference in Labor Code Section 6382(d).
- (b) A chemical is known to the state to cause cancer or reproductive toxicity within the meaning of this chapter if in the opinion of the state's qualified experts it has been clearly shown through scientifically valid testing according to generally accepted principles to cause cancer or reproductive toxicity, or if a body considered to be authoritative by such experts has formally identified it as causing cancer or reproductive toxicity, or if an agency of the state or federal government has formally required it to be labeled or identified as causing cancer or reproductive toxicity.



- (c) On or before January 1, 1989, and at least once per year thereafter, the Governor shall cause to be published a separate list of those chemicals that at the time of publication are required by state or federal law to have been tested for potential to cause cancer or reproductive toxicity but that the state's qualified experts have not found to have been adequately tested as required.
- (d) The Governor shall identify and consult with the state's qualified experts as necessary to carry out his duties under this section.
- (e) In carrying out the duties of the Governor under this section, the Governor and his designates shall not be considered to be adopting or amending a regulation within the meaning of the Administrative Procedure Act as defined in Government Code Section 11370.

#### 25249.9. Exemptions from Discharge Prohibition.

- (a) Section 25249.5 shall not apply to any discharge or release that takes place less than twenty months subsequent to the listing of the chemical in question on the list required to be published under subdivision (a) of Section 25249.8.
- (b) Section 25249.5 shall not apply to any discharge or release that meets both of the following criteria:
  - (1) The discharge or release will not cause any significant amount of the discharged or released chemical to enter any source of drinking water.
  - (2) The discharge or release is in conformity with all other laws and with every applicable regulation, permit, requirement, and order. In any action brought to enforce Section 25249.5, the burden of showing that a discharge or release meets the criteria of this subdivision shall be on the defendant.

#### 25249.10. Exemptions from Warning Requirement.

Section 25249.6 shall not apply to any of the following:

- (a) An exposure for which federal law governs warning in a manner that preempts state authority.
- (b) An exposure that takes place less than twelve months subsequent to the listing of the chemical in question on the list required to be published under subdivision (a) of Section 25249.8.
- (c) An exposure for which the person responsible can show that the exposure poses no significant risk assuming lifetime exposure at the level in question for substances known to the state to cause cancer, and that the exposure will have no observable effect assuming exposure at one thousand (1000) times the level in question for substances known to the state to cause reproductive toxicity, based on evidence and standards of comparable scientific validity to the evidence and standards which form the scientific basis for the listing of such chemical pursuant to subdivision (a) of Section 25249.8. In any action brought to enforce Section 25249.6, the burden of showing that an exposure meets the criteria of this subdivision shall be on the defendant.

#### 25249.11. Definitions.

For purposes of this chapter:

- (a) "Person" means an individual, trust, firm, joint stock company, corporation, company, partnership, limited liability company, and association.
- (b) "Person in the course of doing business" does not include any person employing fewer than 10 employees in his or her business; any city, county, or district or any department or agency thereof or the state or any department or agency thereof or the federal government or any department or agency thereof; or any entity in its operation of a public water system as defined in Section 116275.
- (c) "Significant amount" means any detectable amount except an amount which would meet the exemption test in subdivision (c) of Section 25249.10 if an individual were exposed to such an amount in drinking water.

- (d) "Source of drinking water" means either a present source of drinking water or water which is identified or designated in a water quality control plan adopted by a regional board as being suitable for domestic or municipal uses.
- (e) "Threaten to violate" means to create a condition in which there is a substantial probability that a violation will occur.
- (f) "Warning" within the meaning of Section 25249.6 need not be provided separately to each exposed individual and may be provided by general methods such as labels on consumer products, inclusion of notices in mailings to water customers, posting of notices, placing notices in public news media, and the like, provided that the warning accomplished is clear and reasonable. In order to minimize the burden on retail sellers of consumer products including foods, regulations implementing Section 25249.6 shall to the extent practicable place the obligation to provide any warning materials such as labels on the producer or packager rather than on the retail seller, except where the retail seller itself is responsible for introducing a chemical known to the state to cause cancer or reproductive toxicity into the consumer product in question.

25249.12.

- (a) The Governor shall designate a lead agency [**Office of Environmental Health Hazard Assessment**] and other agencies that may be required to implement this chapter, including this section. Each agency so designated may adopt and modify regulations, standards, and permits as necessary to conform with and implement this chapter and to further its purposes.
- (b) The Safe Drinking Water and Toxic Enforcement Fund is hereby established in the State Treasury. The director of the lead agency designated by the Governor to implement this chapter may expend the funds in the Safe Drinking Water and Toxic Enforcement Fund, upon appropriation by the Legislature, to implement and administer this chapter.
- (c) In addition to any other money that may be deposited in the Safe Drinking Water and Toxic Enforcement Fund, all of the following amounts shall be deposited in the fund:
  - (1) Seventy-five percent of all civil and criminal penalties collected pursuant to this chapter.
  - (2) Any interest earned upon the money deposited into the Safe Drinking Water and Toxic Enforcement Fund.
- (d) Twenty-five percent of all civil and criminal penalties collected pursuant to this chapter shall be paid to the office of the city attorney, city prosecutor, district attorney, or Attorney General, whichever office brought the action, or in the case of an action brought by a person under subdivision (d) of Section 25249.7, to that person.

25249.13. Preservation Of Existing Rights, Obligations, and Penalties.

Nothing in this chapter shall alter or diminish any legal obligation otherwise required in common law or by statute or regulation, and nothing in this chapter shall create or enlarge any defense in any action to enforce such legal obligation. Penalties and sanctions imposed under this chapter shall be in addition to any penalties or sanctions otherwise prescribed by law.

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## Food Safety: Fish Contamination

### *Fish and Game Code*

7715.

- (a) If the Director of **Environmental Health Hazard Assessment** determines, based on thorough and adequate scientific evidence, that any species or subspecies of fish is likely to pose a human health risk from high levels of toxic substances, the Director of Fish and Game may order the closure of any waters or otherwise restrict the taking under a commercial fishing license in state waters of that species. Any such closure or restriction order shall be adopted by emergency regulation in accordance with Chapter 3.5 (commencing with Section 11341) of Division 3 of Title 2 of the Government Code.
- (b) Any closure or restriction pursuant to subdivision (a) shall become inoperative when the Director of **Environmental Health Hazard Assessment** determines that a health risk no longer exists. Upon making such a determination, the Director of **Environmental Health Hazard Assessment** shall notify the Director of Fish and Game and shall request that those waters be reopened for commercial fishing.

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## Art Products Hazards

### *Education Code*

32060.

- (a) The Legislature finds and declares that art supplies which contain toxic substances or which are potential human carcinogens pose a significant danger to the health and safety of school children. The Legislature also finds and declares that school children are not sufficiently protected by present health laws in so far as materials which may be seriously harmful are not so labeled and therefore children are not properly warned as to the dangers inherent in the use of those materials.
- (b) The Legislature intends by this article to ensure that elementary school children are protected by prohibiting the sale of these toxic substances to schools, school districts, and private schools for use in kindergarten and grades 1 to 6, inclusive, and that the toxic substances may be purchased by schools, school districts, and private schools for students in grades 7 to 12, inclusive, only if the materials are properly labeled, as described in Section 32064.

32061. "Art or craft material" means any raw or processed material or manufactured product marketed or being represented by the manufacturer or repackager as being suitable for use in the demonstration or the creation of any work of visual or graphic art of any medium. These media may include, but shall not be limited to, paintings, drawings, prints, sculpture, ceramics, enamels, jewelry, stained glass, plastic sculpture, photographs, and leather and textile goods.

32062.

- (a) "Human carcinogen" means any substance listed as a human carcinogen by the International Agency for Research on Cancer.
- (b) "Potential human carcinogen" means one of the following:
  - (1) Any substance which does not meet the definition of human carcinogen, but for which there exists sufficient evidence of carcinogenicity in animals, as determined by the International Agency for Research on Cancer.
  - (2) Any chemical shown to be changed by the human body into a human carcinogen.

32063. "Toxic substance causing chronic illness" means any of the following:

- (a) Human carcinogens.
- (b) Potential human carcinogens.
- (c) Any substance included in the list of hazardous substances prepared by the Director of Industrial Relations, pursuant to Section 6382 of the Labor Code, notwithstanding exemptions made for substances on the list which are used in particular forms, circumstances, or concentrations, if the health hazard presented by the substance is not the subject of label statements required by federal law.

32064.

- (a) For the 1987-88 academic year and for each academic year thereafter, no art or craft material which is deemed by the **Office of Environmental Health Hazard Assessment** to contain a toxic substance, as defined by the California Hazardous Substance Act, Chapter 13 (commencing with Section 28740) of Division 22 of the Health and Safety Code, or a toxic substance causing chronic illness, as defined in this article, shall be ordered or purchased by any school, school district, or governing authority of a private school in California for use by students in kindergarten and grades 1 to 6, inclusive.

- (b) Commencing June 1, 1987, any substance which is defined in subdivision (a) as a toxic substance causing chronic illness shall not be purchased or ordered by a school, school district, or governing authority of a private school for use by students in grades 7 to 12, inclusive, unless it meets the labeling standards specified in Section 32065.
- (c) If the **Office** finds that, because the chronically toxic, carcinogenic, or radioactive substances contained in an art or craft product cannot be ingested, inhaled, or otherwise absorbed into the body during any reasonably foreseeable use of the product in a way that could pose a potential health risk, the **Office** may exempt the product from these requirements to the extent it determines to be consistent with adequate protection of the public health and safety.
- (d) For the purposes of this article, an art or craft material shall be presumed to contain an ingredient which is a toxic substance causing chronic illness if the ingredient, whether an intentional ingredient or an impurity, is 1 percent or more by weight of the mixture or product, or if the **Office** determines that the toxic or carcinogenic properties of the art or craft material are such that labeling is necessary for the adequate protection of the public health and safety.

32065. Warning labels for substances specified in Section 32064 shall meet all of the following standards:

- (a) The warning label shall be affixed in a conspicuous place and shall contain the signal word "WARNING," to alert users of potential adverse health effects.
- (b) The warning label shall contain information on the health-related dangers of the art or craft material.
  - (1) If the product contains a human carcinogen, the warning shall contain the statement: "CANCER HAZARD! Overexposure may create cancer risk."
  - (2) If the product contains a potential human carcinogen, and does not contain a human carcinogen, the warning shall contain the statement: "POSSIBLE CANCER HAZARD! Overexposure might create cancer risk."
  - (3) If the product contains a toxic substance causing chronic illness, the warning shall contain, but not be limited to, the following statement or statements where applicable:
    - (A) May cause sterility or damage to reproductive organs.
    - (B) May cause birth defects or harm to developing fetus.
    - (C) May be excreted in human milk causing harm to nursing infant.
    - (D) May cause central nervous system depression or injury.
    - (E) May cause numbness or weakness in the extremities.
    - (F) Overexposure may cause damage to (specify organ).
    - (G) Heating above (specify degrees) may cause hazardous decomposition products.
  - (4) If a product contains more than one chronically toxic substance, or if a single substance can cause more than one chronic health effect, the required statements may be combined into one warning statement.
- (c) The warning label shall contain a list of ingredients which are toxic substances causing chronic illness.
- (d) The warning label shall contain a statement or statements of safe use and storage instructions, conforming to the following list. The label shall contain, but not be limited to, as many of the following risk statements as are applicable:
  - (1) Keep out of reach of children.
  - (2) When using, do not eat, drink, or smoke.
  - (3) Wash hands after use and before eating, drinking, or smoking.
  - (4) Keep container tightly closed.
  - (5) Store in well ventilated area.
  - (6) Avoid contact with skin.
  - (7) Wear protective clothing (specify type).
  - (8) Wear NIOSH certified masks for dust, mists, or fumes.
  - (9) Wear NIOSH certified respirator with appropriate cartridge for (specify type).

- (10) Wear NIOSH certified supplied air respirator.
- (11) Use window exhaust fan to remove vapors and assure adequate ventilation (specify explosion proof if necessary).
- (12) Use local exhaust hood (specify type).
- (13) Do not heat above (specify degrees) without adequate ventilation.
- (14) Do not use/mix with (specify material).
- (e) The warning label shall contain a statement on where to obtain more information, such as, "Call your local poison control center for more health information."
- (f) The warning label, or any other label on the substance, shall contain the name and address of the manufacturer or repackager.
- (g) If all of the above information cannot fit on the package label, a package insert shall be required to convey all the necessary information to the consumer. In this event, the label shall contain a statement to refer to the package insert, such as "CAUTION: See package insert before use." For purposes of this section, "package insert" means a display of written, printed, or graphic matter upon a leaflet or suitable material accompanying the art supply. The language on this insert shall be nontechnical and nonpromotional in tone and content.

The requirements set forth in subdivisions (a) to (g), inclusive, shall not be considered to be complied with unless the required words, statements, or other information appear on the outside container or wrapper, or on a package insert which is easily legible through the outside container or wrapper and is painted in a color in contrast with the product or the package containing the product.

An art or craft material shall be considered to be in compliance with this section if Article 4 (commencing with Section 28794) of Chapter 13 of Division 22 of the Health and Safety Code requires labeling of the art or craft material, and if the material is in compliance with that article. The manufacturer of any art or craft material sold, distributed, offered for sale, or exposed for sale in this state shall supply upon request to **Office of Environmental Health Hazard Assessment** any information required by the **Office** in order to perform its duties under this article.

32066. The **Office of Environmental Health Hazard Assessment** shall, by June 1, 1987, develop a list of those art or craft materials which cannot be purchased or ordered for use in kindergarten and in grades 1 to 6, inclusive, and a list of materials which, while not currently sold or manufactured, may be reasonably suspected to still exist at some schools. In developing the lists, the **Office** shall consult with manufacturers of art supplies, artists' groups, health organizations, and toxicologists as the **Office** determines to be appropriate. The **Office** shall periodically update the lists as it determines to be appropriate.

The Superintendent of Public Instruction shall distribute the lists to all school districts and the governing authorities of all private schools in California, and shall make the lists available to preschools, childcare centers, and other businesses and organizations which involve children in the use of art or craft materials. The superintendent shall inform school districts and governing authorities of all private schools of the requirements of this article, and shall encourage school districts and the governing authorities of all private schools to dispose of art or craft material which may contain human carcinogens, potential human carcinogens, or chronically toxic substances, but which is not affected by this article.

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## Motor Vehicle Fuels

### *Health and Safety Code*

43830.8.

- (a) The state board may not adopt any regulation that establishes a specification for motor vehicle fuel unless that regulation, and a multimedia evaluation conducted by affected agencies and coordinated by the state board, are reviewed by the California Environmental Policy Council established pursuant to subdivision (b) of Section 71017 of the Public Resources Code.
- (b) As used in this section, "multimedia evaluation" means the identification and evaluation of any significant adverse impact on public health or the environment, including air, water, or soil, that may result from the production, use, or disposal of the motor vehicle fuel that may be used to meet the state board's motor vehicle fuel specifications.
- (c) The multimedia evaluation shall be based on the best available scientific data, written comments submitted by any interested person, and information collected by the state board in preparation for rulemaking. At a minimum, the evaluation shall address impacts associated with all the following:
  - (1) Emissions of air pollutants, including ozone forming compounds, particulate matter, toxic air contaminants, and greenhouse gases.
  - (2) Contamination of surface water, groundwater, and soil.
  - (3) Disposal or use of the byproducts and waste materials from the production of the fuel.
- (d) The state board shall prepare a written summary of the multimedia evaluation and submit it for peer review in accordance with Section 57004. The state board shall maintain for public inspection, a record of any relevant materials submitted from any state agency and any written public comments received during the multimedia evaluation. The state board shall submit its written summary and the results of the peer review to the California Environmental Policy Council prior to the adoption of the proposed regulation.
- (e) The council shall complete its review of the multimedia evaluation within 90 calendar days following notice from the state board that it intends to adopt the regulation. If the council determines that the proposed regulation will cause a significant adverse impact on the public health or the environment, or that alternatives exist that would be less adverse, the council shall recommend alternative measures that the state board or other state agencies may take to reduce the adverse impact on public health or the environment. The council shall make all information relating to its review available to the public.
- (f) Within 60 days of receiving notification from the council of a determination of adverse impact, the state board shall adopt revisions to the proposed regulation to avoid or reduce the adverse impact, or the affected agencies shall take appropriate action that will, to the extent feasible, mitigate the adverse impact so that, on balance, there is no adverse impact on public health or the environment.
- (g) In coordinating a multimedia evaluation pursuant to subdivision (a), the state board shall **consult with other boards and departments within the California Environmental Protection Agency**, the State Department of Health Services, the State Energy Resources Conservation and Development Commission, the Department of Forestry and Fire Protection, the Department of Food and Agriculture, and other state agencies with responsibility for, or expertise regarding, impacts that could result from the production, use, or disposal of the motor vehicle fuel that may be used to meet the specification.
- (h) Notwithstanding subdivisions (a) through (g), inclusive, the state board may, prior to July 1, 2000, adopt a regulation that was formally proposed prior to January 1, 2000, to revise existing specifications for motor vehicle fuel, if the council reviews the environmental assessment of the

proposed revision and determines that there will be no significant adverse impact on public health or the environment, including any impact on air, water, or soil, that is likely to result from the change in motor vehicle fuel that is expected to be implemented to meet the state board's revised motor vehicle fuel specifications. Such a determination by the council shall be deemed final and conclusive.

- (i) Notwithstanding subdivision (a), the state board may adopt a regulation that establishes a specification for motor vehicle fuel without the proposed regulation being subject to a multimedia evaluation if the council, following an initial evaluation of the proposed regulation, conclusively determines that the regulation will not have any significant adverse impact on public health or the environment.



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## Building Materials: Insulation

### *Public Resources Code*

25911. The State Energy Resources Conservation and Development Commission may adopt regulations pertaining to urea formaldehyde foam insulation materials as are reasonably necessary to protect the public health and safety. These regulations may include, but are not limited to, prohibition of the manufacture, sale, or installation of urea formaldehyde foam insulation, requirements for safety notices to consumers, certification of installers, and specification of installation practices. Regulations adopted pursuant to this section shall be promulgated after public hearings in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. Any regulation adopted by the commission to prohibit the sale and installation of urea formaldehyde foam insulation shall be based upon a record of scientific evidence which demonstrates the need for the prohibition in order to protect the public health and safety.

25912. Prior to adopting any regulation which causes a prohibition on the sale and installation of urea formaldehyde foam insulation, the commission shall consult with, and solicit written comments from, all of the following:

- (a) Federal and state agencies with appropriate scientific staffs, including, but not limited to, the State Department of Health Services, the **Office of Environmental Health Hazard Assessment**, the National Academy of Sciences, the United States Department of Housing and Urban Development, the United States Department of Energy, and the United States Consumer Product Safety Commission.
- (b) Universities and public and private scientific organizations.

## **Hazardous Materials Management**

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### **Research: Studies**

#### ***Health and Safety Code***

25410. The Legislature finds and declares the following:

- (a) Hazardous materials, including hazardous substances and hazardous wastes, are present in the state and pose acute and chronic health risks to individuals who live and work in this state, and who are exposed to these substances as a result of fires, spills, industrial accidents, or other types of releases or emissions.
- (b) The people who live and work in this state have a right and a need to know of the use and dangers of hazardous materials in their communities in order to plan for, and respond to, potential exposure to these materials.
- (c) Basic information on the location, type, characteristics, and health risks of hazardous materials used, stored, or disposed of in the state is not currently available to firefighters, health officials, planners, elected officials, and residents. There are gaps in the information collected and the data is stored in various formats, thereby limiting its effective use to protect the public health and safety.
- (d) Existing state data base computer systems are not capable of effectively exchanging hazardous material information nor are they accessible to state and local agencies which have a need for the information.

25411. As used in this chapter:

- (a) "Agency" means the California Environmental Protection Agency.
- (b) "Handle" means to use, generate, process, produce, package, treat, store, or dispose of a hazardous material in any fashion.
- (c) "Hazardous material" means any of the following materials:
  - (1) A material listed in subdivision (b) of Section 6382 of the Labor Code.
  - (2) A material defined in Section 25115, 25117, or 25316.
  - (3) Any other material which the director determines, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the community.
- (d) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.
- (e) "Secretary" means the Secretary for Environmental Protection.

25416.

- (a) All studies and community information programs conducted pursuant to this section shall be done only if either subdivision (b) applies or if funds are available without restructuring the department's funding priorities. The department shall conduct these studies and information programs in the following manner:

- (1) The department shall, except as provided in subdivision (b), and in conjunction with the local health officer, the State Department of Health Services, and the **Office of Environmental Health Hazard Assessment**, conduct or contract for epidemiological studies to identify and monitor health effects related to exposure to hazardous materials, as defined in Section 66084 of Title 22 of the California Code of Regulations. A study may be conducted in any area of the state identified by the department or the local health officer as a site of potential exposure to hazardous materials, including, but not limited to, any of the following areas:
  - (A) All communities located near hazardous waste disposal facilities.
  - (B) In all communities containing hazardous substance release sites listed pursuant to Section 25356 or listed pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. Sec. 9601 et seq.).
  - (C) In all areas around the location of major generators of hazardous waste.
  - (D) In all other areas identified by local health officers or the department as possible locations of public exposure to hazardous materials.
- (2) The department, in consultation with the State Department of Health Services and the **Office of Environmental Health Hazard Assessment**, shall determine which epidemiological studies are to be conducted pursuant to this section based on the potential for public exposure to hazardous materials. Studies in areas near Class I hazardous waste disposal facilities, as defined in Section 2531 of Title 23 of the California Code of Regulations, shall be given the highest priority for funding. If a hearing is conducted pursuant to Section 25149 and the hearing officer determines that there is a significant potential for endangerment to the public as a result of the suspected or actual release of a hazardous material, the department shall give priority to conducting an epidemiological study for that facility.
- (3) If a local health officer determines that a study should be conducted pursuant to this section because of a potential public exposure to hazardous materials, the local health officer may request that the department initiate or contract for a study pursuant to this section by demonstrating to the department that there is sufficient evidence that justifies the need for a study. The department shall respond to the local health officer's request within 90 days.
- (4) A local health officer may contract with qualified persons or firms to produce the epidemiological studies specified in paragraph (1).
- (5) The design and methodology of any study conducted pursuant to this section shall be reviewed and approved by the department, the State Department of Health Services, and the **Office of Environmental Health Hazard Assessment** prior to the initiation of the study.
- (6) In any county in which hazardous waste disposal facilities are located and in all other counties in which the department identifies significant actual or potential public exposure to hazardous materials, the department shall, in conjunction with the local health officer, conduct or contract for a community information program with respect to sites of potential exposure to hazardous materials identified under paragraph (1) to do all of the following:
  - (A) Organize and conduct educational programs for local physicians and other health professionals on the effects of exposure to hazardous materials and reporting requirements.
  - (B) Disseminate information to high risk populations on the health effects of exposure to hazardous materials.
  - (C) Conduct public forums on the health effects of exposure to hazardous substances and methods of limiting exposure.
- (7) Paragraph (6) does not apply to hazardous substance release sites listed on the National Priorities List for which the Environmental Protection Agency has assumed lead responsibility for community relations.
- (b) If a county is authorized to impose a license tax pursuant to Section 25149.5 for revenue purposes, the department may require the county to provide funding for carrying out epidemiological studies or the community information program concerning the hazardous waste facility subject to the

license tax. The department shall provide the county with technical assistance to conduct an epidemiological study pursuant to this subdivision. The department may exempt a county from the requirement of this subdivision if the county demonstrates to the department that the revenue potential from the facility would not be adequate to conduct an epidemiological study or community information program. When considering a county request for an exemption, the department shall consider the regulatory costs and responsibilities of the county related to that facility.

- (c) The department shall expend funds from the Hazardous Substance Account, upon appropriation by the Legislature, to conduct studies and community information programs in counties containing a hazardous substance release site listed pursuant to Section 25356. The department shall expend funds from the Hazardous Waste Control Account, upon appropriation by the Legislature, to conduct all other studies and community information programs conducted pursuant to this section, except as provided in subdivision (b).

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## Site Clean-up

### *Health and Safety Code*

901.

- (f) (1) On or before December 31, 2002, the **Office** shall publish a guidance document, for use by the Department of Toxic Substances Control and other state and local environmental and public health agencies, to assess exposures and health risks at existing and proposed schoolsites. The guidance document shall include, but not be limited to, all of the following:
  - (D) Appropriate child-specific routes of exposure unique to the school environment, in addition to those in existing exposure assessment models.
  - (E) Appropriate available child-specific numerical health effects guidance values, and plans for the development of additional child-specific numerical health effects guidance values.
  - (F) The identification of uncertainties in the risk assessment guidance, and those actions that should be taken to address those uncertainties.
- (2) The **Office** shall consult with the Department of Toxic Substances Control and the State Department of Education in the preparation of the guidance document required by paragraph (1) in order to ensure that it provides the information necessary for these two agencies to meet the requirements of Sections 17210.1 and 17213.1 of the Education Code.
- (g) On or before January 1, 2002, the **Office**, in consultation with the appropriate entities within the California Environmental Protection Agency, shall identify those chemical contaminants commonly found at schoolsites and determined by the **Office** to be of greatest concern based on criteria that identify child-specific exposures and child-specific physiological sensitivities. On or before December 31, 2002, and annually thereafter, the **Office** shall publish and make available to the public and to other state and local environmental and public health agencies and school districts, numerical health guidance values for five of those chemical contaminants identified pursuant to this subdivision until the contaminants identified have been exhausted.

25356.2.

- (a) There is hereby created in the **Office of Environmental Health Hazard Assessment** a Hazardous Substance Cleanup Arbitration Panel.
- (b) The panel shall apportion liability for the costs of removal and remedial actions in accordance with Sections 25356.3 and 25356.4. All meetings and records of the panel are exempt from Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of, and Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of, the Government Code.
- (c) The panel shall be comprised of independent private arbitrators who have applied to the **Office of Environmental Health Hazard Assessment** for membership on the panel. Panel members shall have (1) relevant arbitration background and (2) expertise in engineering, expertise in the physical, biological, or health sciences, or other relevant experience and qualifications. Three arbitrators shall be selected from the panel to apportion liability for a single hazardous waste site. A majority of the arbitrators selected for a single site may apportion liability for the panel under this chapter.
- (d) The arbitrators shall be selected for an individual hazardous wastesite as follows:
  - (1) One arbitrator shall be selected by the department or by the regional water quality control board.
  - (2) One arbitrator shall be selected by the potentially responsible party, or a majority of the potentially responsible parties, who have submitted to binding arbitration by the panel.

- (3) The two arbitrators selected pursuant to paragraphs (1) and (2) shall jointly select a third arbitrator.

25356.3.

- (a) The department or the California regional water quality control board shall serve a copy by mail of the draft remedial action plan upon all potentially responsible parties identified in the plan. Within 15 days after the issuance of a final remedial action plan, any potentially responsible parties with aggregate alleged liability in excess of 50 percent of the costs of removal and remedial action, as set forth in the statement of reasons issued pursuant to subdivision (d) of Section 25356.1, but excluding any costs that are the subject of an agreement under which any party agrees to assume liability for those costs, may convene an arbitration proceeding by agreeing to submit to binding arbitration by the panel. The filing of a demand to convene an arbitration panel shall not stay any removal or remedial actions specified in the plan. If an arbitration panel is convened pursuant to this section, any other potentially responsible party may elect to submit to binding arbitration by the panel. Any person submitting to arbitration under this section shall agree not to contest the fact of liability in the arbitration. The panel shall, and the parties are entitled to, address the proper apportionment of liability pursuant to subdivision (b). Submission to arbitration under this section is not an admission of liability for any other purpose or in any other proceeding, including a subsequent arbitration proceeding concerning the same site. The department or the regional water quality control board, whichever issued the final remedial action plan, shall participate in the arbitration proceedings to the same extent as the potentially responsible parties which have submitted to the arbitration.
- (b) The panel shall apportion liability for the costs of all removal and remedial actions specified in the final remedial action plan.
- (c) In panel proceedings, liability for the costs of removal and remedial actions shall be apportioned among all identifiable potentially responsible parties regardless of whether those parties are before the panel or have otherwise been released, or are immune, from liability pursuant to this chapter or any other provision of law. The panel shall apportion liability based on all of the following criteria:
  - (1) The amount of hazardous substance for which each party may be responsible.
  - (2) The degree of toxicity of the hazardous substance.
  - (3) The degree of involvement of the potentially responsible parties in the generation, transportation, treatment, or disposal of the hazardous substance.
  - (4) The degree of care exercised by the potentially responsible parties with respect to the hazardous substances, taking into account the characteristics of the substance.
  - (5) The degree of cooperation by the potentially responsible parties with federal, state, and local officials to prevent harm to human health and the environment.
- (d) The panel may issue subpoenas and subpoenas duces tecum to require attendance of a person or the production of documents, at the request of any person identified as potentially responsible in the remedial action plan, on its own motion, or at the request of the department or the appropriate regional water quality control board. A person requesting a subpoena duces tecum shall comply with Section 1985 of the Code of Civil Procedure. The jurisdiction of subpoenas and subpoenas duces tecum issued by the panel extends to all parts of the state. The subpoenas and subpoenas duces tecum shall be served pursuant to Sections 1987 and 1988 of the Code of Civil Procedure. If the panel determines that a person is refusing to respond to a subpoena or subpoena duces tecum, or is guilty of a misconduct during the arbitration and negotiation process, the panel shall certify the facts to the superior court of the county in which the site is located. The court shall thereupon issue an order directing the person to appear before the court and show cause why the person should not be punished for contempt pursuant to Section 1209 of the Code of Civil Procedure. The order and a copy of the certified statement shall be served on the person, and thereafter the court shall have jurisdiction of the matter. The same proceedings shall be followed, the same penalties

may be imposed, and the person charged may be purged of contempt in the same way as if the person has committed a contempt in the trial of a civil action before a superior court. After receipt of documents pursuant to a subpoena duces tecum, any party may request the panel for a continuance for a reasonable period of time to review the documents prior to proceeding with the arbitration. The panel may grant a continuance for that purpose upon a showing of good cause.

- (e) This chapter does not require a regional water quality control board or the State Water Resources Control Board to engage in arbitration pursuant to this section or Section 25356.2 for any enforcement action taken pursuant to Division 7 (commencing with Section 13000) of the Water Code.
- (f) The costs of conducting the arbitration shall be borne by the potentially responsible parties submitting to the arbitration pursuant to subdivision (a), except that any filing fees, witness fees, costs of discovery, or any other costs necessarily incurred by one party shall not be shared by any other party.

#### 25356.4.

- (a) After making an apportionment of liability among the potentially responsible parties pursuant to Section 25356.3, the panel shall prepare a draft arbitration decision which contains a statement of reasons supporting the apportionment and shall circulate the draft arbitration decision for at least 30 days for public comment. After review and consideration of any public comment, the panel shall issue the final arbitration decision within 30 days after the comment period.
- (b) Each potentially responsible party whose liability has been apportioned by the panel is liable to the department or the regional water quality control board for its apportioned share of the costs of all removal and remedial actions at the site which is the subject of the final remedial action plan issued pursuant to Section 25356.1. The department or the regional water quality control board and one or more potentially responsible parties may enter into a cleanup agreement which is consistent with the remedial action plan and which provides for the satisfaction of the liability of a potentially responsible party by the party's performance of specified removal or remedial actions at the site.
- (c) The moneys in the state account or the Hazardous Substance Cleanup Fund may be expended, upon appropriation by the Legislature, to pay any share of those potentially responsible parties who did not submit to binding arbitration pursuant to Section 25356.3 or did not otherwise agree to pay the costs of the removal and remedial actions specified in the remedial action plan.
- (d) The department or the regional water quality control board shall identify, and the Attorney General shall pursue recovery from, those potentially responsible parties who have not submitted to binding arbitration pursuant to Section 25356.3 or who have not discharged their obligations required by the final arbitration decision or the cleanup agreement.
- (e) Advances from the state account, upon appropriation by the Legislature, shall be made available, where appropriate, to those responsible parties who are required by a cleanup agreement to perform specified removal or remedial actions pursuant to the remedial action plan. Moneys from the Hazardous Substance Cleanup Fund may be expended by the department, upon appropriation by the Legislature, to make advances, where appropriate, to responsible parties who are required by a cleanup agreement to perform specified removal or remedial actions pursuant to the remedial action plan, for the purposes specified in Section 25385.6.

25356.10. **The Office of Environmental Health Hazard Assessment** shall adopt, and may, from time to time, modify, revise, or repeal, regulations, consistent with this article, to implement the provisions of this article concerning arbitration proceedings. The regulations may include, but are not required to be limited to, all of the following:

- (a) The method of initiating arbitration.
- (b) The place of hearing, based upon the convenience of the parties.
- (c) Procedures for the selection of neutral arbitrators.
- (d) Procedure for conducting hearings.

- (e) The providing of experts to assist the arbitrators if assistance is needed.
- (f) Procedures for reimbursing the expenses which the panel incurs in conducting arbitrations

### ***Health and Safety Code***

57008.

- (a) For purposes of this section, the following definitions apply:
  - (1) "Agency" means the California Environmental Protection Agency.
  - (2) "Contaminant" means all of the following:
    - (A) A substance listed in Tables II and III of subparagraphs (A) and (B) of paragraph (2) of subdivision (a) of Section 66261.24 of Title 22 of the California Code of Regulations.
    - (B) The five halogenated hydrocarbon industrial solvents that, in the experience of the State Water Resources Control Board and the Department of Toxic Substances Control are most commonly found as contaminants at sites subject to remediation under the Carpenter-Presley-Tanner Hazardous Substances Account Act (Chapter 6.8 (commencing with Section 25300) of Division 20) and the Porter-Cologne Water Quality Control Act (Division 7 (commencing with Section 13000) of the Water Code).
    - (C) Ten hazardous substances not included under subparagraphs (A) and (B) that, in the experience of the Department of Toxic Substances Control and the State Water Resources Control Board, are most commonly found as contaminants at sites subject to remediation under the Carpenter-Presley-Tanner Hazardous Substances Account Act (Chapter 6.8 (commencing with Section 25300) of Division 20) and the Porter-Cologne Water Quality Control Act (Division 7 (commencing with Section 13000) of the Water Code).
  - (3) "Screening number" means the concentration of a contaminant published by the agency as an advisory number pursuant to the process established in subdivisions (b) and (c). A screening number is solely an advisory number, and has no regulatory effect, and is published solely as a reference value that may be used by citizen groups, community organizations, property owners, developers, and local government officials to estimate the degree of effort that may be necessary to remediate a contaminated property. A screening number may not be construed as, and may not serve as, a level that can be used to require an agency to determine that no further action is required or a substitute for the cleanup level that is required to be achieved for a contaminant on a contaminated property. The public agency with jurisdiction over the remediation of a contaminated site shall establish the cleanup level for a contaminant pursuant to the requirements and the procedures of the applicable laws and regulations that govern the remediation of that contaminated property and the cleanup level may be higher or lower than a published screening number.
- (b) (1) During the same period when the agency is carrying out the pilot study required by Section 57009 and preparing the informational document required by Section 57010, the agency shall initiate a scientific peer review of the screening levels published in Appendix 1 of Volume 2 of the technical report published by the San Francisco Regional Water Quality Control Board entitled "Application of Risk-Based Screening Levels and Decision-Making to Sites with Impacted Soil and Groundwater (Interim Final-August 2000)." The agency shall conduct the scientific peer review process in accordance with Section 57004, and shall limit the review to those substances specified in paragraph (2) of subdivision (a). The agency shall complete the peer review process on or before December 31, 2004.
- (2) The agency, in cooperation with the Department of Toxic Substances Control, the State Water Resources Control Board, and the **Office of Environmental Health Hazard Assessment**, shall publish a list of screening numbers for contaminants listed in paragraph (2) of subdivision (a) for the protection of human health and safety, and shall report on the feasibility of establishing screening numbers to protect water quality and ecological



- resources. The agency shall determine the screening numbers using the evaluation set forth in Section 25356.1.5 and the results of the peer review, and shall use the most stringent hazard criterion established pursuant to Subpart E of the National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. 300.400 et seq.), as amended. The agency shall set forth separate screening levels for unrestricted land uses and a restricted, nonresidential use of land. In determining each screening number, the agency shall consider all of the following:
- (A) The toxicology of the contaminant, its adverse effects on human health and safety, biota, and its potential for causing environmental damage to natural resources, including, but not limited to, beneficial uses of the water of the state, including sources of drinking water.
  - (B) Risk assessments that have been prepared for the contaminant by federal or state agencies pursuant to environmental or public health laws, evaluations of the contaminant that have been prepared by epidemiological studies and occupational health programs, and risk assessments or other evaluations of the contaminant that have been prepared by governmental agencies or responsible parties as part of a project to remediate a contaminated property.
  - (C) Cleanup levels that have been established for the contaminant at sites that have been, or are being, investigated or remediated under Chapter 6.8 (commencing with Section 25300) of Division 20, or cleaned up or abated under Division 7 (commencing with Section 13000) of the Water Code or under any other remediation program administered by a federal or local agency.
  - (D) Screening numbers that have been published by other agencies in the state, in other states, and by federal agencies.
  - (E) The results of external scientific peer review of the screening numbers made pursuant to Section 57004.
- (c)
    - (1) Before publishing the screening numbers pursuant to subdivision (b), the agency shall conduct two public workshops, one in the northern part of the state and the other in the southern part of the state, to brief interested parties on the scientific and policy bases for the development of the proposed screening numbers and to receive public comments.
    - (2) Following publication of the screening numbers pursuant to subdivision (b), the agency shall conduct three public workshops in various regions of the state to discuss the screening numbers and to receive public comments. The agency shall select an agency representative who shall serve as the chairperson for the workshops, and the agency shall ensure that ample opportunity is available for public involvement in the workshops. The deputy secretary for external affairs shall actively seek out participation in the workshops by citizen groups, environmental organizations, community-based organizations that restore and redevelop contaminated properties for park, school, residential, commercial, open-space or other community purposes, property owners, developers, and local government officials.
  - (d) Following the workshops required by subdivision (c), the agency shall revise the screening numbers as appropriate. The agency shall, from time to time, revise the screening numbers as necessary as experience is gained with their use and shall add screening numbers for contaminants to the list as information concerning remediation problems becomes available.
  - (e) The agency shall publish a guidance document for distribution to citizen groups, community-based organizations, property owners, developers, and local government officials that explains how screening numbers may be used to make judgments about the degree of effort that may be necessary to remediate contaminated properties, to facilitate the restoration and revitalization of contaminated property, to protect the waters of the state, and to make more efficient and effective decisions in local-level remediation programs.

- (f) Nothing in this section affects the authority of the Department of Toxic Substances Control, the State Water Resources Control Board, or a regional water quality control board to take action under any applicable law or regulation regarding a release or threatened release of hazardous materials.

***Business and Professions Code***

10084.1.

- (a) Notwithstanding Section 10450.6, on or before January 1, 1991, the department, using funds appropriated from the Education and Research Account in the Real Estate Fund, shall develop a booklet to educate and inform consumers on all of the following:
  - (1) Common environmental hazards that are located on, and affect, real property. The types of common environmental hazards shall include, but not be limited to, asbestos, radon gas, lead-based paint, formaldehyde, fuel and chemical storage tanks, and water and soil contamination.
  - (2) The significance of common environmental hazards and what can be done to mitigate these hazards.
  - (3) What sources can provide more information on common environmental hazards for the consumer.
- (b) The department shall seek the advice of the **Office of Environmental Health Hazard Assessment** to assist it in determining the contents of the booklet prepared pursuant to this section, and shall seek the assistance of the **Office of Environmental Health Hazard Assessment** in the writing of the booklet.

# **Emergency Response**

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## **Administrative Order**

### **AUTHORITY**

- California Emergency Services Act
- Governor's letter to Agency Secretaries dated 9/12/00
- Executive Order W-9-91 dated 5-29-91
- California State Emergency Plan

### **PURPOSE**

This Administrative Order:

1. Summarizes and expands upon the emergency preparedness, response, recovery, and mitigation functions of the State Agency established in the California State Emergency Plan.
2. Provides for the assignment of functions to State Agencies to be performed before, during, and after an emergency and for the coordination and direction of the emergency actions of such agencies.
3. Guides the Director of the Office of Emergency Services and the State Agency Director in coordinating priority tasks and programs that the State Agency will perform with respect to emergency preparedness, response, recovery, and mitigation.

### **GENERAL**

4. As a supporting document to the California State Emergency Plan, the Administrative Order is in effect at all times in all political subdivisions of the State.

### **ROLE OF THE GOVERNOR'S OFFICE OF EMERGENCY SERVICES**

5. The Office of Emergency Services coordinates the State's disaster preparedness, response, recovery, and mitigation activities, assisted by state agencies under the authority of the California Emergency Services Act, Executive Order W-9-91, California Disaster and Civil Defense Master Mutual Aid Agreement, and the California State Emergency Plan.
6. Upon direction of the Governor, the Director of the Office of Emergency Services may assign to a State Agency any activity concerned with the mitigation of an emergency of a nature related to the existing powers and duties of such agency, and it shall thereupon become the duty of such agency to undertake and carry out such activity on behalf of the State.
7. OES, acting for the Governor, reserves the right to redirect resources based on an assessment of the totality of circumstances.

### **ROLE OF STATE AGENCIES**

8. For purposes of the Administrative Order, State Agency means any department, division, independent establishment, or agency of the executive branch of state government.

9. State Agencies carry out assigned activities related to mitigating the effects of an emergency or disaster in full cooperation with each other, the Office of Emergency Services, and other political subdivisions providing assistance.
10. OES may, upon direction of the Governor, assign a State Agency to perform a service outside its normal statutory responsibility during a State of Emergency or State of War Emergency.
11. State Agencies may be requested to provide support under specific emergency or disaster situations even if the support task is not assigned in the State Emergency Plan.
12. As a signatory to the California Disaster and Civil Defense Master Mutual Aid Agreement, State government and all its departments and agencies, and the various political subdivisions of the state, render mutual aid to affected jurisdictions when requested.
13. All public employees are Disaster Service Workers and, as such, may be called upon to respond in a duly proclaimed emergency.

### **STATE AGENCY RESPONSIBILITIES**

#### **The OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT shall:**

14. Use the Standardized Emergency Management System (SEMS) to coordinate multiple jurisdiction or multiple agency emergency and disaster operations. This requires State Agencies to plan, train, exercise, and respond using SEMS.
15. Accomplish the assigned objectives of the State Emergency Plan and the emergency operations activities associated with its jurisdictional authorities.

### **CONTINUITY OF GOVERNMENT**

16. Establish a program for continuity of leadership and government authority to include the following:
  - Succession to essential positions required to maintain decision authority.
  - Pre-delegation of emergency authorities to key officials.
  - Emergency action steps provided in emergency plans and emergency action plans.
  - Department Operations Centers and alternate emergency operations centers.

### **CONTINUITY OF BUSINESS**

17. Take all necessary and appropriate steps to continue essential services during an emergency.
18. Take appropriate measures to protect personnel, equipment, supplies, facilities, and vital public records against natural, man-made, and technological hazards.
19. Redirect all other resources, when tasked or as necessary and appropriate, to effectively mitigate any emergency or disaster.
20. Determine State Agency resources required to continue essential services, and develop the ability to track and allocate resources necessary to provide emergency response and recovery activities.
21. Coordinate development and integration of all appropriate emergency operational plans with the State Agency's emergency plan.

## **PREPAREDNESS**

22. Designate in advance, and when requested by the Office of Emergency Services (OES), provide primary and alternate representatives for interagency emergency planning, notification, operations, recovery, mitigation, and public information.
23. In coordination with OES, develop and maintain plans and procedures to carry out emergency response and recovery responsibilities.
24. Develop and submit agency emergency plans to OES for review and approval.
25. Document the hazards, risks, and hazard mitigation measures in agency emergency management plans; upon request, provide hazard-related information to OES to ensure effective coordination and decision making in an emergency.
26. Coordinate plans, procedures, preparations, and training with affected federal, state, regional, local, quasi-public, and private entities.
27. Enter into working agreements as necessary with these entities, in coordination with OES, to promote effective emergency response and recovery.
28. Those agencies identified in the State Emergency Plan as lead or support for a function are responsible for working cooperatively with each other, and in coordination with OES, to prepare plans and procedures to carry out that function in an emergency.
29. Ensure that all personnel assigned specific responsibilities in support of this Administrative Order, the State Agency Emergency Plan, and the State Emergency Plan are adequately trained and prepared to assume those responsibilities.
30. Train personnel assigned emergency response and recovery functions at all organizational levels, conduct exercises, and participate in local, state, and federal agency exercises, including those conducted by OES.
31. Establish alerting and mobilization procedures.
32. Name a public information representative to coordinate Emergency Public Information plans and procedures with the Office of Emergency Services Public Information Office.
33. In the event of a threat of war or enemy-caused emergency or disaster, review the State Agency's readiness and take appropriate actions.

## **The OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT *specific preparedness***

### **OPERATIONS**

#### **Hazardous Materials**

- Maintain list of chemicals known to the state to cause cancer or reproductive toxicity.

### **LOGISTICS**

- Develop and maintain library and other technical and reference resources of chemical, health, toxicology, and other scientific information.

## **RESPONSE**

34. Implement the applicable portions of Agency emergency plans.
35. Alert personnel and mobilize resources in affected areas.
36. Upon request, provide trained personnel, equipment, and essential incident-related information to OES to support response operations.
37. Coordinate emergency response with federal, state, local, and other agencies.
38. Establish liaison with allied governmental and private sector agencies in or adjacent to the disaster area as needed.

39. Provide public information support to Office of Emergency Services headquarters, regional offices, or local jurisdictions as required during state emergency or disaster response operations.
40. Locate and assess amounts of damage to any of the Agency's state-owned facilities or property under Agency jurisdiction. Report this information to OES as soon as possible.
41. Record and report to OES any costs incurred in carrying out emergency operations, in accordance with pre-established procedures.
42. A State Agency designated as lead in the State Emergency Plan for an emergency function or response and recovery activity is responsible for the overall management and coordination of that particular function or activity.
43. A State Agency designated as a support agency for an emergency function in the State Emergency Plan is responsible for providing support to the lead agency in carrying out that particular function.

## **OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT *specific response activities***

### **OPERATIONS**

#### **Hazardous Materials**

- Provide health effects information to incident command, following hazardous material releases.
- Provide health effects information, to local health agencies and health professionals following hazardous material releases.
- Provide technical staff such as toxicologists and epidemiologists to identify health effects of hazardous materials, including those that may cause discomfort, disability or pose a threat to life.
- Provide assistance in determining public health risk and environmental threats of hazardous substances.
- Provide technical assistance, including chemical risk characterization information, to responders in assessing potential exposures for decisions on sheltering-in-place, evacuation, and re-entry.
- Provide technical staff, such as toxicologists and epidemiologists, to assist in environmental fate assessment, determining health and environmental consequences of breakdown products, reaction products, and intermedia transfers.

### **LOGISTICS**

- Provide library and other technical reference resources of chemical, health, toxicology, and other scientific information.
- Provide communication and data transfer equipment such as cellular telephones, and portable computers.

### **RECOVERY**

44. Upon request, provide personnel and equipment to OES to support recovery operations.
45. During recovery from a declared disaster, participate in the Public Assistance process, as appropriate.
46. Coordinate with OES to identify sensitive, environmental, and historic sites that should receive priority consideration.
47. Provide public information support as required to assist in recovery operations.
48. Develop and implement procedures to resume normal departmental activities.
49. Following involvement in a disaster, submit after-action reports detailing agency activities to OES consistent with the Standardized Emergency Management System.
50. Document response and recovery activities to include times, locations, type of activity, and cost estimates expended for labor and equipment.
51. In the event a declaration of a State of Emergency or Local Emergency results in an economic disaster as defined in Government Code, Section 8696.5 be prepared to take actions to provide continuity of effort conducive to long-range economic recovery.

**The OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT *specific recovery activities***

**OPERATIONS**

**Hazardous Materials**

- Provide chemical risk characterization information on public health risk and environmental threats of hazardous substances.
- Provide technical staff such as toxicologists and epidemiologists to assist in environmental fate assessment, determining health and environmental consequences of breakdown products, reaction products, and intermedia transfers.
- Perform or assist in epidemiological studies to ascertain health effects related to exposure to hazardous materials.
- Coordinate the provision of timely and accurate health effects information.
- Provide consultation on environmental sampling and residual risks associated with remediation.
- Provide support to local health agencies and health professionals following hazardous material releases by providing toxicological information.

**MITIGATION**

52. Identify, document, and when practical, implement those activities that potentially could reduce or lessen the impact of an emergency.
53. Establish hazard mitigation as an integral element in operations and program delivery as appropriate.
54. During a Presidential declaration of a major disaster, participate in the Hazard Mitigation Planning process.

**OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT *specific mitigation activities***

N/A

**APPROVAL**

55. The provisions hereof shall become effective on the date of signature below.

\_\_\_\_\_  
DIRECTOR NAME, Agency

Date: \_\_\_\_\_

\_\_\_\_\_  
SECRETARY NAME, Agency

Date: \_\_\_\_\_

\_\_\_\_\_  
DALLAS JONES, Director, OES

Date: \_\_\_\_\_

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## Uncontrolled Release: Hazardous Materials

### *Health and Safety Code*

25531.

- (a) The Legislature finds and declares that a significant number of chemical manufacturing and processing facilities generate, store, treat, handle, refine, process, and transport hazardous materials. The Legislature further finds and declares that, because of the nature and volume of chemicals handled at these facilities, some of those operations may represent a threat to public health and safety if chemicals are accidentally released.
- (b) The Legislature recognizes that the potential for explosions, fires, or releases of toxic chemicals into the environment exists. The protection of the public from uncontrolled releases or explosions of hazardous materials is of statewide concern.
- (c) There is an increasing capacity to both minimize and respond to releases of toxic air contaminants and hazardous materials once they occur, and to formulate efficient plans to evacuate citizens if these discharges or releases cannot be contained. However, programs designed to prevent these accidents are the most effective way to protect the community health and safety and the environment. These programs should anticipate the circumstances that could result in their occurrence and require the taking of necessary precautionary and preemptive actions, consistent with the nature of the hazardous materials handled by the facility and the surrounding environment.
- (d) As required by Clean Air Act amendments enacted in 1990 (P.L. 101-549), the Environmental Protection Agency has developed a program for the prevention of accidental releases of regulated substances. In developing the program, the Environmental Protection Agency thoroughly reviewed a wide variety of chemical and hazardous substances to identify substances that might pose a risk to public health or safety or to the environment in the event of an accidental release. The Environmental Protection Agency developed a program to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and the environment. The federal program provides no options for implementing agencies to diminish the requirements or applicability of the federal program.
- (e) In light of this new federal program, the Legislature finds and declares that the goals of reducing regulated substances accident risks and eliminating duplication of regulatory programs can best be accomplished by implementing the federal risk management program in the state, with certain amendments that are specific to the state. Therefore, it is the intent of the Legislature that the state seek and receive delegation of the federal program for prevention of accidental releases of regulated substances established pursuant to Section 112(r) of the federal Clean Air Act (42 U.S.C. Section 7412 (r)), by implementing the federal program as promulgated by the Environmental Protection Agency, with certain amendments that are specific to the state.

25531.1. The Legislature finds and declares that the public has a right to know about acutely hazardous materials accident risks that may affect their health and safety, and that this right includes full and timely access to hazard assessment information, including offsite consequence analysis for the most likely hazards, which identifies the offsite area which may be required to take protective action in the event of an acutely hazardous materials release. The Legislature further finds and declares that the public has a right to participate in decisions about risk reduction options and measures to be taken to reduce the risk or severity of acutely hazardous materials accidents.



25531.2.

- (a) The Legislature finds and declares that as the state implements the federal accidental release prevention program pursuant to this article, the Office of Emergency Services will play a vital and increased role in preventing accidental releases of extremely hazardous substances. The Legislature further finds and declares that as an element of the unified program established pursuant to Chapter 6.11 (commencing with Section 25404), a single fee system surcharge mechanism is established by Section 25404.5 to cover the costs incurred by the office pursuant to this article. It is the intent of the Legislature that this existing authority, together with any federal assistance that may become available to implement the accidental release program, be used to fully fund the activities of the office necessary to implement this article.
- (b) The office shall use any federal assistance received to implement Chapter 6.11 (commencing with Section 25404) to offset any fees or charges levied to cover the costs incurred by the office pursuant to this article.

25532. Unless the context indicates otherwise, the following definitions govern the construction of this article:

- (a) "Accidental release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.
- (b) "Administering agency" means the local agency authorized, pursuant to Section 25502, to implement and enforce this article.
- (c) "Covered process" means a process that has a regulated substance present in more than a threshold quantity.
- (d) "Modified stationary source" means an addition or change to a stationary source that qualifies as a "major change," as defined in Subpart A of Part 68 of Title 40 of the Code of Federal Regulations. "Modified stationary source" does not include an increase in production up to the source's existing operational capacity or an increase in production level, up to the production levels authorized in a permit granted pursuant to Section 42300.
- (e) "Process" means any activity involving a regulated substance, including any use, storage, manufacturing, handling, or onsite movement of the regulated substance or any combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located so that a regulated substance could be involved in a potential release, shall be considered a single process.
- (f) "Qualified person" means a person who is qualified to attest, at a minimum, to the completeness of an RMP.
- (g) "Regulated substance" means any substance that is either of the following:
  - (1) A regulated substance listed in Section 68.130 of Title 40 of the Code of Federal Regulations pursuant to paragraph (3) of subsection (r) of Section 112 of the Clean Air Act (42 U.S.C. Sec. 7412(r)(3)).
  - (2) (A) An extremely hazardous substance listed in Appendix A of Part 355 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations that is any of the following:
    - (i) A gas at standard temperature and pressure.
    - (ii) A liquid with a vapor pressure at standard temperature and pressure equal to or greater than ten millimeters mercury.
    - (iii) A solid that is one of the following:
      - (I) In solution or in molten form.
      - (II) In powder form with a particle size less than 100 microns.
      - (III) Reactive with a National Fire Protection Association rating of 2, 3, or 4.
    - (iv) A substance that the office determines may pose a regulated substances accident risk pursuant to subclause (II) of clause (i) of subparagraph (B) or pursuant to Section 25543.3.

- (B) (i) On or before June 30, 1997, the office shall, in consultation with the **Office of Environmental Health Hazard Assessment**, determine which of the extremely hazardous substances listed in Appendix A of Part 355 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations do either of the following:
  - (I) Meet one or more of the criteria specified in clauses (i), (ii), or (iii) of subparagraph (A).
  - (II) May pose a regulated substances accident risk, in consideration of the factors specified in subdivision (g) of Section 25543.1, and, therefore, should remain on the list of regulated substances until completion of the review conducted pursuant to subdivision (a) of Section 25543.3.
- (ii) The office shall adopt, by regulation, a list of the extremely hazardous substances identified pursuant to clause (i). Extremely hazardous substances placed on the list are regulated substances for the purposes of this article. Until the list is adopted, the administering agency shall determine which extremely hazardous substances should remain on the list of regulated substances pursuant to the standards specified in clause (i).
- (h) "Regulated substances accident risk" means a potential for the accidental release of a regulated substance into the environment that could produce a significant likelihood that persons exposed may suffer acute health effects resulting in significant injury or death.
- (i) "RMP" means the risk management plan required under Part 68 (commencing with Section 68.1) of Subchapter C of Chapter I of Title 40 of the Code of Federal Regulations and by this article.
- (j) "State threshold quantity" means the quantity of a regulated substance described in subparagraph (A) of paragraph (2) of subdivision (g), as adopted by the office pursuant to Section 25543.1 or 25543.3. Until the office adopts a state threshold quantity for a regulated substance, the state threshold quantity shall be the threshold planning quantity for the regulated substance specified in Appendix A of Part 355 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations.
- (k) "Stationary source" means any stationary source, as defined in Section 68.3 of Title 40 of the Code of Federal Regulations.
- (l) "Threshold quantity" means the quantity of a regulated substance that is determined to be present at a stationary source in the manner specified in Section 68.115 of Title 40 of the Code of Federal Regulations and that is the lesser of either of the following:
  - (1) The threshold quantity for the regulated substance specified in Section 68.130 of Title 40 of the Code of Federal Regulations.
  - (2) The state threshold quantity.

#### 25543.1.

- (a) Any person may submit a petition to the office for the addition of a material to, or for the deletion of a material from, the regulated substances list adopted pursuant to subparagraph (B) of paragraph (2) of subdivision (g) of Section 25532 or to revise the existing state threshold quantities that are used as the standards for registration and RMP compliance.
- (b) A petition submitted pursuant to subdivision (a) shall be accompanied by a submission fee, to be established by the office, in consultation with the **Office of Environmental Health Hazard Assessment**. The fee shall be in an amount that is sufficient to pay for the reasonable costs incurred by the office and the **Office of Environmental Health Hazard Assessment** necessary to carry out this section. Upon the receipt of the petition and fee, the office shall transmit to the **Office of Environmental Health Hazard Assessment** funds sufficient to pay for the reasonable costs incurred by the **Office of Environmental Health Hazard Assessment** to carry out this section.

- (c) An owner or operator of a stationary source shall not delay implementation of this article in anticipation of a ruling on a petition to delist a regulated substance or to change a state threshold quantity.
- (d) The office shall notify administering agencies of petitions for adding or delisting regulated substances or for changing state threshold quantities and shall take comments from administering agencies on the petitions. All comments shall be responded to in writing.
- (e) The office shall notify the public of petitions for adding or delisting regulated substances or for changing state threshold quantities and shall take public comment on the petitions. All comments shall be responded to in writing.
- (f) (1) The office shall request the **Office of Environmental Health Hazard Assessment** to review the petitions and make recommendations to the office regarding the petitions.
- (2) Each recommendation made pursuant to paragraph (1) shall be based on current scientific knowledge and a sound and open scientific review and shall contain a finding whether a substance should be added to, or deleted from, the regulated substance list, or whether the state threshold quantity for a regulated substance should be revised.
- (g) The petition review by the **Office of Environmental Health Hazard Assessment** shall take into consideration all of the following factors:
  - (1) The severity of any acute adverse health effect associated with an accidental release of the substance.
  - (2) The likelihood of an accidental release of the substance.
  - (3) The potential magnitude of human exposure to an accidental release of the substance.
  - (4) The results of other preexisting evaluations of the substances potential risks which take into account the factors specified in paragraphs (1), (2), and (3), including, but not limited to, studies or research undertaken by, or on behalf of, the Environmental Protection Agency for the purpose of complying with paragraph (3) of subsection (r) of Section 112 of the Clean Air Act (42 U.S.C. Sec. 7412 (r)(3)).
  - (5) The likelihood of the substance being handled in this state.
  - (6) The accident history of the substance.
- (h) Upon receipt of a recommendation made pursuant to subdivision (f), the office may add or remove a substance or change an existing state threshold quantity as a requirement for this article.
- (i) In reviewing a petition under this section, the office shall consider the views of administering agencies that have indicated support or opposition to the petition.

#### 25543.2.

- (a) A stationary source that intends to modify a facility which may result either in a significant increase in the amount of regulated substances handled by the facility or in a significantly increased risk in handling a regulated substance, as compared to the amount of substances and the amount of risk identified in the facility's RMP relating to the covered process proposed for modification, shall do all the following, prior to operating the modified facility:
  - (1) Where reasonably possible, notify the administering agency in writing of the stationary source's intent to modify the facility at least five calendar days before implementing any modifications. As part of the notification process, the stationary source shall consult with the administering agency when determining whether the RMP should be reviewed and revised. Where prenotification is not reasonably possible, the stationary source shall provide written notice to the administering agency no later than 48 hours following the modification.
  - (2) Establish procedures to manage the proposed modification, which shall be substantially similar to the procedures specified in Section 1910.119 of Title 29 of the Code of Federal Regulations pertaining to process safety management, and notify the administering agency that the procedures have been established.
- (b) The stationary source shall revise the appropriate documents, as required pursuant to subdivision (a), expeditiously, but not later than 60 days from the date of the facility modification.

25543.3. On or before June 30, 1998, the office, in consultation with the **Office of Environmental Health Hazard Assessment**, shall do all of the following:

- (a) Review each regulated substance on the list established pursuant to subparagraph (B) of paragraph (2) of subdivision (g) of Section 25532 and, taking into consideration the factors specified in subdivision (g) of Section 25543.1, determine if the regulated substance should remain subject to regulation under this article or should be deleted from that list of regulated substances.
- (b) Review the state threshold quantity for each regulated substance that the office determines should remain on the list of regulated substances, and determine, taking into consideration the factors specified in subdivision (g) of Section 25543.1, if the state threshold quantity should be revised.
- (c) Adopt regulations, which amend the list of regulated substances adopted pursuant to subparagraph (B) of paragraph (2) of subdivision (g) of Section 25532, and adopt state threshold quantities for regulated substances, based on the determinations of the office under subdivisions (a) and (b).

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## Agricultural Pest Eradication

### *Food and Agricultural Code*

405.

- (a) With the prior approval of the Department of Fish and Game and the **Office of Environmental Health Hazard Assessment** the Department of Food and Agriculture and the Department of Pesticide Regulation may reproduce or distribute biological control organisms that are not detrimental to the public health and safety which are known to be useful in reducing or preventing plant or animal damage due to pests or diseases.
- (b) The Department of Food and Agriculture and the Department of Pesticide Regulation shall not engage in the production of beneficial organisms when those organisms are available for purchase from commercial sources.

5029.

- (a) The department, in consultation with the **Office of Environmental Health Hazard Assessment**, shall design and implement a program to provide information to persons who reside in areas scheduled to be treated with pesticides on an emergency basis in order to eradicate plant pests.
- (b) The purpose of this program is to provide information about the health effects of the pesticides used in eradication projects. The program shall be designed to provide the greatest amount of information practicable to affected citizens. The department shall conduct outreach efforts to inform the public about the existence of this program.
- (c) The department shall implement this section during 1985 and shall report on its implementation to the Legislature by December 31, 1985.

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## Transportation

### *Health and Safety Code*

59019.

- (a) On or before July 1, 1992, and on or before July 1 annually thereafter, the **Office of Environmental Health Hazard Assessment** shall provide to the Legislature and the Public Utilities Commission, for the purpose of Section 7672 of the Public Utilities Code, a list of commodities, set forth by category, that pose potential threats to the public, property, and the environment when transported on railroad lines in the state. The **Office** shall develop the categories in consultation with the Office of Emergency Services.
- (b) The **Office**, in determining which commodities pose potential threats, shall consider both the toxicity of the commodity itself and the toxicity of any potential breakdown elements of the commodity when exposed to air, water, or other chemical agents that the commodity or its byproducts might contact under normal circumstances or in the event of mishandling, accident, or other possible event associated with, transporting the commodity on railroad lines in the state. In developing the list pursuant to this section, the office shall consider excluding those consumer products that are shipped in finished packages which, due to their packaging or quantity, are not likely to pose a hazard to the public or environment in the event of a train derailment or other surface accident. The list shall be used exclusively for the purposes specified in Sections 7711 and 7712 of the Public Utilities Code.
- (c) The Public Utilities Commission shall provide the office with all information about railroad operations which the office needs to make the determination required by this section.

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## Oil Spill Contingency

### *Government Code*

8574.9.

- (a) The State Interagency Oil Spill Committee shall consist of all of the following persons:
  - (1) The administrator named by the Governor pursuant to Section 8670.4.
  - (2) The Chairpersons of the State Lands Commission and the California Coastal Commission, or their designees.
  - (3) A designated representative from all of the following agencies:
    - (A) The Office of Emergency Services.
    - (B) The State Water Resources Control Board.
    - (C) The Department of Justice.
    - (D) The California Highway Patrol.
    - (E) The California National Guard.
    - (F) The Division of Oil and Gas in the Department of Conservation.
    - (G) The Department of Toxic Substances Control.
    - (H) The Department of Transportation.
    - (I) The Department of Parks and Recreation.
    - (J) The Department of Water Resources.
    - (K) The Department of Forestry and Fire Protection.
    - (L) The State Fire Marshal.
    - (M) The California regional water quality control boards (one representative).
    - (N) The Resources Agency.
    - (O) The Office of Environmental Affairs California Environmental Protection Agency.
    - (P) The California Conservation Corps.
    - (Q) The **Office of Environmental Health Hazard Assessment**.
- (b) The administrator shall be the chairperson of the committee. The administrator shall ensure that personnel serve as staff to the committee.

8574.21.

- (a) Not later than one year after the effective date of this article, the Office of Emergency Services shall develop the curriculum to be used in classes which meet the program requirements and shall adopt standards and procedures for training instructors at the California Specialized Training Institute.
- (b) The curriculum for the training and education program established pursuant to this article shall include all of the following aspects of hazardous substance incident response actions:
  - (1) First responder training.
  - (2) On-scene manager training.
  - (3) Hazardous substance incident response training for management personnel.
  - (4) Hazardous materials specialist training that equals or exceeds the standards of the National Fire Protection Association.
  - (5) Environmental monitoring.
  - (6) Hazardous substance release investigations.
  - (7) Hazardous substance incident response activities at ports.
- (c) The Office of Emergency Services shall establish a curriculum development advisory committee, which shall consist of a representative from each of the following agencies or organizations:

- (1) The Office of Emergency Services.
  - (2) The Office of the State Fire Marshal.
  - (3) The Department of Toxic Substances Control.
  - (4) The Department of Fish and Game.
  - (5) The State Water Resources Control Board.
  - (6) The Department of the California Highway Patrol.
  - (7) The California Police Chiefs' Association.
  - (8) The California Fire Chiefs' Association.
  - (9) The Commission on Police Officer Standards and Training.
  - (10) The California District Attorneys' Association.
  - (11) The Department of Forestry and Fire Protection.
  - (12) The Emergency Medical Services Authority.
  - (13) The Department of Transportation.
  - (14) The Environmental Protection Agency.
  - (15) The Chemical Industry Council of California.
  - (16) The California Manufacturers Association.
  - (17) The California Conference of Local Health Officers.
  - (18) The University of California.
  - (19) The California State Fireman's Association.
  - (20) The California State University.
  - (21) The California Professional Firefighters.
  - (22) The California Association of Highway Patrolmen.
  - (23) The California State Police Association.
  - (24) The **Office of Environmental Health Hazard Assessment**.
- (d) The curriculum development advisory committee shall advise the Office of Emergency Services on the development of course curricula and the standards and procedures specified in subdivision (a). In advising the Office of Emergency Services, the committee shall do the following:
- (1) Assist, and cooperate with, representatives of the Board of Governors of the California Community Colleges in developing the course curricula.
  - (2) Ensure that the curriculum developed pursuant to this section is accredited by the State Board of Fire Services.
  - (3) Define equivalent training and experience considered as meeting the initial training requirements as specified in subdivision (a) that existing employees might have already received from actual experience or formal education undertaken, and which would qualify as meeting the requirements established pursuant to this article.
- (e) The representative from the Office of Emergency Services shall serve as the chairperson of the curriculum development advisory committee.
- (f) After the course curricula and standards are established pursuant to subdivision (a), the curriculum development advisory committee shall meet at least once each year to review the program and advise the Office of Emergency Services on any required revisions.
- (g) The Office of Emergency Services shall make the curriculum development advisory committee a subcommittee of the Curriculum Advisory Board of the California Specialized Training Institute.
- (h) This article does not affect the authority of the State Fire Marshal granted pursuant to Section 13142.4 or 13159 of the Health and Safety Code.
- (i) Upon completion of instructor training and certification pursuant to subdivision (e) of Section 8574.20 by any employee of the Department of the California Highway Patrol, the Commissioner of the California Highway Patrol may deem any training programs taught by that employee to be equivalent to any training program meeting the requirements established pursuant to this article.



**APPENDIX C**  
**WORKLOAD STANDARDS**

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**  
**Office of Environmental Health Hazard Assessment**  
**WORKLOAD MATRIX**

**Table 1. Air Toxicology and Epidemiology Section: Toxic Air Contaminants (Including Children's Health)**

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 5.0 Staff Toxicologist 3.0 Associate Toxicologist 1.0 Research Scientist II  1.0 Public Health Medical Officer II \$300K/yr contract funds for specialty literature searches. \$60K/yr contract funds for organizing and convening an annual symposium on children's health issues.	Develop health effects assessments (including RELs and cancer potency estimates) for TACs. Conduct peer review of documents, respond to public comments, revise documents. Support ARB's identification of TACs. Assist ARB prioritization of candidate TACs for review and existing TACs for health effects assessment. Assess adequacy of existing risk assessment procedures and practices for protecting infants and children's health. Develop appropriate risk assessment methodologies for developing cancer potency factors and RELs adequate for protection of infants and children. Establish and maintain list of TACs that may cause infants or children to be especially susceptible to illness. Conduct symposia with invited scientists on risk assessment methods for protecting infants and children and related issues. Present health effects assessment to ARB at public meetings.	Review toxicology and epidemiology studies (about 100-1,000 studies/chemical). Develop health effects assessments, including dose-response assessments specific for infants and children for 15 TACs/yr. Develop 0.5-1 health effects assessment including quantitative risk assessment for candidate TAC/yr. Develop one biannual report on findings on age-related susceptibility/responses to toxicants. 3-6 public comment periods/yr. (followed by written responses to all comments). 3-6 public meetings/yr. Plan, organize, and hold 1 scientific symposium on children's environmental health and risk assessment issues per year. One report amending the list of TACs that may disproportionately impact children/yr. 3-6 Scientific Review Panel (SRP) meetings/yr. Adopt 15-20 new health values (cancer potency factors, RELs) and one new list formally/yr. 1-4 ARB meetings per year involving TAC issues (either new listing or Airborne Toxic Control Measures).	Based on experience preparing health affects assessments for candidate TACs. Based on experience developing risk assessment methodologies for carcinogens and for non-cancer toxic endpoints. Based on experience evaluating literature and developing health values for toxic air contaminants. Based on experience meeting with and presenting to the SRP. Based on experience in presenting at public meetings and conducting external peer review.

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**  
**Office of Environmental Health Hazard Assessment**  
**WORKLOAD MATRIX**

**Table 2. Emerging Scientific/Chemical Issues: Fuels Assessment (Including Children's Health)**

<b>Position(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>
1.0 Public Health Medical Officer II 1.0 Associate Toxicologist 2.0 Research Scientist II	<p>Evaluate literature for toxicological effects of pollutants associated with fuel usage to develop testable hypotheses for epidemiological studies.</p> <p>Conduct epidemiological studies on health effects of fuel-related pollutants, particularly on children and other sensitive populations (e.g., elderly, those with pre-existing respiratory illness and asthma).</p> <p>Obtain and review relevant air pollution data.</p> <p>Conduct appropriate statistical analyses.</p> <p>Prepare reports for publication.</p>	<p>Conduct one study every 2-3 years (develop hypothesis, protocol, recruit participants, etc).</p> <p>Review 100-200 papers/yr.</p>	<p>Previous experience in conducting epidemiological studies.</p>

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**  
**Office of Environmental Health Hazard Assessment**  
**WORKLOAD MATRIX**

**Table 3. Air Toxicology and Epidemiology Section: Criteria Air Pollutants (Including Children's Health)**

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Research Scientist Supervisor II 3.0 Research Scientist II .5 Research Scientist I 1.0 Staff Toxicologist 2.0 Public Health Medical Officer II \$250K/yr contract funds to plan, design, and conduct epidemiology studies.	Develop recommendations for Ambient Air Quality Standards protective of infants and children for Criteria Air Pollutants. Evaluate epidemiological, medical, and toxicological data. Conduct scientific and public workshops. Prepare reports describing health impacts of criteria air pollutant. Evaluate data and analyze relative impacts on the health of infants and children. Conduct peer review through AQAC, respond to comments, and revise report. Provide technical support to ARB for board hearings. Conduct epidemiological investigations of health effects of criteria air pollutants. Seek external funding for research. Prepare findings for publication.	Prepare documentation for the recommendation for Ambient Air Quality Standards, including report on health impacts, for 1 criteria air pollutant/yr. Evaluate data for 1 criteria air pollutant/yr for health impacts on infants and children. Review 1,000-5,000 journal articles/chemical/yr. 2-5 scientific and public workshops/yr. Develop 1-3 protocols/yr. for epidemiological studies. Obtain relevant air pollution data for 2-5 chemicals/yr. Conduct 10-20 statistical analyses on associations between air pollutants and health/yr. Prepare 2-3 reports/yr for publication. Prepare 3-6 proposals/yr for external funding (responding to RFPs).	Based on experience in evaluating criteria air pollutants and recommending Ambient Air Quality Standards since 1980. Based on previous experience conducting the East Bay Children's Respiratory health study, and numerous other epidemiological studies.

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**  
**Office of Environmental Health Hazard Assessment**  
**WORKLOAD MATRIX**

**Table 4. Air Toxicology and Epidemiology Section: Air Toxic Hot Spots Act and Exposure Assessment (Including Children's Health)**

<b>Position(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>
1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 2.0 Research Scientist II 1.0 Research Scientist I \$90K/yr contract funds for specialty literature searches.	Maintain risk assessment guidelines (e.g., exposure assessment factors and modeling). Evaluate literature and assess utility of data to ascertain unique exposure patterns in children and infants. Obtain raw data to conduct statistical analyses. Convene the children's environmental health workshops. Assess adequacy of existing exposure modeling procedures and practices for protecting infants and children's health. Provide training on risk assessment methods, in particular use of stochastic exposure modeling. Review health risk assessments conducted under AB 2588. Provide technical assistance to the Air Pollution Control Districts to interpret risk assessments. Provide assistance to ARB on implementing AB 2588, including developing software for health risk assessment. Attend public notification meetings.	Review and evaluate 10-100 articles and 1-2 large reports/yr. on exposure patterns among infants and children. Conduct 10-20 statistical analyses/yr. to develop appropriate infant-specific and child-specific exposure factors. Develop 0.5 to 1 document with proposed changes to guidelines (for guidelines maintenance)/yr. 2-4 public meetings attended/yr. 10-50 inquiries on Hot Spots risk assessment methods applications/yr. 1-3 public comment periods/yr. (followed by written response to comments). 5-10 health risk assessments conducted under AB 2588 reviewed/yr.	Based on experience reviewing risk assessment since 1989. Based on previous experience contracting out literature searches/retrievals/reviews for a large number of chemicals listed under the Hot Spots program. Based on previous experience conducting workshops and symposia in 2000, 2001, and 2002. Based on previous experience contracting outside experts on exposure factors issues.

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**Table 5. Air Toxicology and Epidemiology Section: Indoor Air**

<b>Position(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>
1.0 Staff Toxicologist 1.0 Associate Toxicologist 1.5 Research Scientist II	<p>Evaluate toxicological, epidemiological, and other relevant literature to assess potential health impacts of indoor air contaminants.</p> <p>Develop indoor air RELs, including quantitative risk assessments, for use in assessing the health impacts of common indoor air pollutants, particularly those associated with use of recycled materials in buildings.</p> <p>Provide input to ARB on indoor air risk assessment.</p> <p>Participate in statewide indoor air oriented projects (e.g., green building), including document development.</p> <p>Conduct public comment periods and external peer review, respond to comments, revise documents.</p>	<p>1-3 RELs for indoor air/yr.</p> <p>100-1,000 articles reviewed/yr.</p> <p>1-2 public comment periods/yr. (followed by written response to comments).</p> <p>10-30 ARB and public inquiries responded to/yr.</p> <p>10-15 interagency meetings/yr.</p> <p>1-2 interagency documents (e.g., Green Building standards/reports)/yr.</p>	<p>Based on previous experience in developing indoor RELs.</p> <p>Based on previous experience participating in statewide indoor air-related working groups.</p>

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**Table 7. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Community Health Investigations**

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Research Scientist Supervisor I 0.5 PHMO III 0.15 PHMO II 1.0 Research Scientist II 0.5 Staff toxicologist \$150K/yr contract funds for software development and distribution, site visits and field investigations, short-term investigative team (students, translators), local communications needs for field studies.	Assemble and evaluate existing criteria and guidelines, including BT systems. Develop criteria and guidelines to assure scientific approach and coordination with various agencies. Adapt software systems for PDA/laptop enhanced field investigation and data transfer for rapid case ascertainment and analysis. Conduct studies based on PIRs, PURs, case reports, etc, and at the request of the LHO. Provide toxicological and epidemiological technical assistance to LHO and CACs. Develop training/educational program to state and local agencies. Develop and distribute software for rapid data gathering and analysis. Rapid deployment of field investigators, as contingency.	2criteria and guidelines reviewed. 1-2 criteria/guidelines developed/yr. 1 software/yr. 4 software programs deployed to local agencies/yr 1 studies/yr. 3 training/educational programs conducted/yr.	Extensive historical experience since 1980's in conducting these type of studies. Software development has been achieved through similar staffing resources for other programs in OEHHA. Experience with contracts.

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**Table 8. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Risk Assessment**

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist .2 Research Scientist Supv. I 4.0 Staff Toxicologist	<p>Supervise staff, ensure productivity and meeting timelines.</p> <p>Peer review DPR RCDs and provide written comments.</p> <p>Use RCD results/findings as a basis for pursuing additional health-related studies and for making recommendations to protect human health.</p> <p>Review data waiver requests for making determinations.</p> <p>Peer review DPR TACs, provide written comments, and prepare health-based findings.</p> <p>Provide toxicological support to other agencies: ARB, SWRCB.</p> <p>Identify and review US EPA documents.</p> <p>From analysis of the RCDs and TAC documents, develop toxicological, epidemiological, and exposure assessment studies to answer public health questions.</p> <p>Address special issues (toxicological, exposure assessment, and methodological) and develop peer review guidelines.</p>	<p>4-8 RCDs reviewed/yr.</p> <p>1-4 TACs reviewed/yr.</p> <p>1-3 findings on TACs produced/yr</p> <p>1-25 data waivers reviewed/yr</p> <p>1-2 of health-related studies/yr.</p> <p>2-6 special issues addressed/yr.</p>	<p>Experience since 1984 in reviewing and commenting on RCDs.</p> <p>Experience since 1984 in reviewing and making determinations on data waiver requests.</p> <p>Experience since 1987 on reviewing and commenting on TACs.</p> <p>Experience since mid-1980's in evaluating toxicity of pesticides based on public health concerns and environmental contamination (food, water, accidental releases such as toxic spills, pesticide drift).</p>



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**Table 9. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Occupational and Public (Community/Residential) Health and Safety**

Position(s)	Workload	Workload Standard	Basis for Standard
0.2 Research Scientist Supervisor I 1.5 Staff Toxicologist  0.25 Public Health Medical Officer II  (Note: Includes receiving technical support from the Medical Supervision Program staff.)	Identify regulatory needs and work with DPR and others to formulate regulations to prevent acute and chronic occupational disease and community health concerns resulting from pesticide exposures. Review and evaluate the complex scientific basis (toxicology, epidemiology, and exposure assessment) for regulatory standards. Work with DPR and CACs on implementing worker health and safety regulations. Review air monitoring data. Review and approve exposure study protocols submitted by registrants and coordinated by DPR.	2-6 regulations (emergency/permanent) reviewed/developed/approved/yr. 6-12 exposure protocols reviewed/approved/yr. 1-3 monitoring and exposure studies reviewed/yr. Review and evaluate the complex scientific basis (toxicology, epidemiology, and exposure assessment) for regulatory standards, 2-6/yr. (Some reassessments with new data). Review annual air monitoring report. Participate in 2-4 public hearings/yr. Participate in interagency workgroups, 6 -12 meetings/yr.	Based on experience since mid 1980's in illness investigations, scientific review and evaluations, toxicological assessments, and field practices consistent with good worker health & safety practice, and toxicological principles.

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**Table 10. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Medical Supervision and Physician Training**

Position(s)	Workload	Workload Standard	Basis for Standard
0.2 Research Scientist Supervisor I .6 Public Health Medical Officer II 0.5 Public Health Medical Officer III .5 Staff Toxicologist	<p>Supervise staff, ensure productivity and timeline</p> <p>Provide training on “Pesticide poisoning-recognition and management” to physicians and health professionals</p> <p>Expand training to rural health clinics, medical managers, ER physicians, poison control centers, nurses, and PAs.</p> <p>Develop training DVDs and web-based distance learning sessions.</p> <p>Develop training syllabus for pesticide by classification and exposure outcomes.</p> <p>Develop curriculum on chronic effects of pesticide and the inert ingredients.</p> <p>Sponsor pesticide symposia.</p> <p>Develop/Establish National Center for Physician Education.</p>	<p>Number of physicians trained averages about 500/yr.</p> <p>New curriculum development, 1 set/yr by pesticide classification.</p> <p>New curriculum development, 1 set/yr by chronic toxicity.</p> <p>Sponsor 1-2 symposia/yr.</p> <p>Review and update training syllabus, minor - continuous, major - every 2 yrs.</p> <p>Review and update training curriculum, minor-continuous, major - every 2 yrs.</p> <p>Class materials produced and provided to participants for each training and upgraded as resources permit.</p> <p>Develop pamphlets and announcements of training program (distribute 2,000/yr)</p> <p>Development and update of the Guidelines for Physicians describing the California Medical Supervision Program (every 2-3 yrs).</p> <p>Interact with local and state health officers, environmental programs; attend meetings of health officers association.</p>	<p>Experience in providing physician training since early 1980’s. Initiative in early 1990’s and results of a survey of physicians in late 1990’s provided support.</p> <p>Over the past three years about 1,300 physicians have received direct training.</p>

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**Table 11. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Pesticide Illness Reporting (PIR)**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>0.2 Research Scientist Supervisor I</p> <p>\$50K/yr contract funds for software development.</p>	<p>Supervise staff</p> <p>Guide reporting system development and implementation</p> <p>Develop Web-based, geocoded, confidential reporting system.</p> <p>Incorporate medical symptom and treatment info on new system.</p> <p>Modernize and clarify form.</p> <p>Establish pesticide reporting on existing reporting forms provided by DHS for other conditions.</p> <p>Provide training to physician groups and health officers on new system.</p> <p>Develop auto reported and auto analyzed PIR system.</p> <p>Link new PIR system to DPR case investigation reports and local agricultural commissioners' geocoded NOIs.</p> <p>Establish pesticide poisoning cohort.</p> <p>Link PIR data system to lab reporting of ChE testing.</p> <p>Facilitate regulation development of mandatory reporting ChE.</p>	<p>Update and modernized reporting form (single form, multiple pages of questions and instructions).</p> <p>Upgrade system into electronic format (conversion from existing form).</p> <p>Software development (initial development followed by updating every two yrs).</p> <p>System implementation and testing is an ongoing effort.</p> <p>Maintenance of system (i.e., keeping database updated) is an ongoing effort.</p> <p>Review individual PIR forms, 500-1,000/yr.</p> <p>Review overall and update PIR forms every 1-2 yrs.</p> <p>Train physicians on using new system, 100-500/yr.</p> <p>Establish cohorts, 1-2/yr.</p> <p>ChE reporting and development and updating procedure and methods, ongoing effort.</p>	<p>Experience with manual pesticide illness reporting system since early 1980's.</p> <p>Experience in development of illness reporting forms.</p> <p>Experience with environmental and electronic linkage and tracking of illnesses.</p> <p>Experience collaborating with other state departments.</p> <p>Software development has been achieved through similar staffing resources for other programs in OEHHA.</p> <p>Experience with contracts.</p>

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**Table 12. Pesticide and Environmental Toxicology Section: Food Safety: Pesticide and Other Chemical Residues**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>3.0 Staff Toxicologist</p> <p>\$50K contract/yr for collecting data on food and nutrition surveys, time-consuming data summaries with student help.</p>	<p>Review food consumption surveys.</p> <p>Develop dietary risk assessments.</p> <p>Analyze existing research information and promote CA race/ethnic/SES health and nutritional survey, including biomonitoring.</p> <p>Develop population-based pesticide (other chemicals as appropriate) dietary guidance.</p> <p>Promote awareness of chemical toxicity-nutrition interplay.</p> <p>Evaluate dietary data for use in Relative Source Contribution (RSC) computation in PHG development.</p> <p>Develop "reference values" database to compile and manage toxicological reference values.</p>	<p>Review surveys, 3/yr.</p> <p>Identify/prioritize chemicals of concern, 5/yr.</p> <p>Identify/prioritize food of concern, 5/yr.</p> <p>Review/evaluate dietary intake of the above, 1-5/yr.</p> <p>Develop guidelines for assessment, 1-2/yr.</p> <p>Conduct risk assessment, 1-5/yr.</p> <p>Develop guidance for safe food consumption, 1 every 2 yrs.</p> <p>Develop guidance for balancing nutrition vs health risk from food (pesticide and other chemicals in food), 1 every 2 yrs.</p> <p>Develop and maintain database with existing qualified information, ongoing effort.</p> <p>Plan. Develop reference values.</p>	<p>Based on a program of 20 plus years studying pesticides and other chemicals in the environment, including food.</p> <p>Conduct of dietary assessments for pesticides in several food contamination episodes - ethylene dibromide in cereal grains and bakery products, daminozide in apples and apple juice, aldicarb in watermelon and bananas.</p> <p>Conduct of risk assessments for chemicals in food episodes - lead in ceramic ware, selenium in fish and ducks, methylmercury in fish, chloroform in soft drinks.</p> <p>Experience developing drinking water goals for 130 chemicals (using RSCs), since mid-80's.</p> <p>20 plus years of experience in developing health criteria for drinking water, fish, pesticide, air toxics, waste sites and specific cancer and reproductive endpoints (for drugs, consumer products).</p>

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**Table 13. Pesticide and Environmental Toxicology Section: Food Safety: Fish Contamination**

Position(s)	Workload	Workload Standard	Basis for Standard
0.5 Senior Toxicologist 3.0 Staff Toxicologist 1.0 Research Scientist II 1.0 Office Assistant \$50K/yr contract funds for student assistance in conducting research, data entry, and organizing abstracts/tables/etc.	<p>Supervise staff, ensure productivity and timelines, coordinate with other programs, develop and manage contracts.</p> <p>Develop consumption advisories for chemicals in fish and wildlife.</p> <p>Perform chemical-specific toxicological studies and research.</p> <p>Maintain current knowledge of methods and QA/QC procedures for data used in developing fish consumption advisories.</p> <p>Collect and organize chemical contaminant data for fish from external monitoring programs into consistent files structures that can be accessed for analysis.</p> <p>Provide toxicological and technical assistance to local and federal governmental entities in human health risks associated with fish contamination and consumption.</p> <p>Conduct workshops explaining advisory recommendations and respond to public inquiries and comments.</p> <p>Generate GIS maps of advisory sites.</p> <p>Develop fact sheets and outreach materials for consumption advisories.</p>	<p>1-7 consumption advisories per year for fish and wildlife contaminated with chemicals from individual water bodies based on review of monitoring reports and methods, toxicity criteria, epidemiology, and exposure analysis. (Note: The number of advisories varies depending on the size of the water body and number of chemicals and fish species that are assessed.)</p> <p>Toxicological analysis of 2-10 chemical contaminants/yr, following the review of 50-500 scientific articles/yr.</p> <p>Address 1-4 special tox/environmental/ public health issues/yr (mercury in fish, dioxin in oysters) following review of specific scientific reports.</p> <p>1-4 workshops/public meetings/year. Respond to three or more public inquiries per month on chemicals in fish.</p> <p>1-4 fact sheets/yr for advisories or health effects of specific chemicals.</p> <p>Coordinate with DHS' community outreach activities (continuous).</p> <p>Technical support to DHS regarding toxicological basis of advisories (4/yr).</p> <p>Develop and update education and outreach materials annually.</p> <p>Students prepare time-consuming data summary abstracts and tables.</p> <p>Clerical support – technical document production/revision and submission (includes word processing, logging and tracking, filing and other support functions).</p>	<p>Experience in developing and preparing fish consumption advisories.</p> <p>Experience in conducting risk assessment of fish and wildlife contaminants.</p> <p>Experience interacting with other agencies involved in issues related to fish contamination.</p> <p>Experience in preparing for and coordinating workshops.</p> <p>Experience in developing advisory and educational brochures.</p> <p>Based on experience analyzing databases generated by state programs, developing statistical tools for analysis, developing and operating data management systems, including GIS.</p>

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**Table 14. Pesticide and Environmental Toxicology Section: Water Quality: Surface Waters**

Position(s)	Workload	Workload Standard	Basis for Standard
0.5 Senior Toxicologist 1.1 Staff Toxicologist 1.0 Research Scientist II	<p>Supervise staff, ensure productivity and timelines, coordinate with other programs, develop and manage contracts.</p> <p>Review Water Board water standards criteria and TMDL documents.</p> <p>Develop statewide water quality criteria or recommend guidelines for water contaminants that bioaccumulate.</p> <p>Perform chemical-specific toxicological studies and research.</p> <p>Identify, review, and evaluate information to select target species, sites, and chemicals for Coastal Fish Contamination Program, Water Board Regional sampling, and other water quality projects.</p> <p>Provide toxicological and technical assistance to local and federal governmental entities in the area of human health assessment criteria relating to water quality.</p> <p>Generate GIS maps of water bodies, sampling sites, and pollution sources.</p> <p>Evaluate methylmercury criteria, methodology, and policies.</p> <p>Develop TBA discharge guidelines.</p>	<p>Review and evaluation of two to five criteria or TMDL documents per year for human health to see that human health risk are assessed correctly.</p> <p>Development and preparation of health risk assessments for water contaminants for two to five projects/yr.</p> <p>Review and evaluation of three to 10 reports submitted per year on fish distribution, prevalence and landings, chemistry data, collection results, and fish consumption surveys.</p> <p>Enter and evaluate annual data for 50-100+ sites, multiple species, and up to 90 chemicals and other variables per species-site combination from Water Board bioaccumulation monitoring programs.</p> <p>Maintain database and plan yearly monitoring.</p> <p>Respond to one or more technical issues concerning health issues for water contaminants per month from Water Board, Regional Boards, or other agencies.</p> <p>Develop TBA discharge guidelines (limited term project).</p> <p>Evaluation of methylmercury tissue criteria, and BAF and translator methodology to implement a discharge policy (limited term project).</p>	<p>Experience in developing water quality assessments.</p> <p>Experience interacting with other agencies involved in issues related to water quality.</p> <p>Experience in conducting statistical analyses and entering data into database.</p> <p>Based on experience analyzing past databases generated by state programs, developing statistical tools for analysis, developing and operating data management systems, including GIS.</p> <p>Experience –in developing sampling plans for statewide and regional monitoring that can be used to generate data to assess exposure and risk from fish consumption.</p> <p>Based on experience of current support provided to SWRCB and 20 years of criteria and guidelines development for chemicals.</p>

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**Table 15. Pesticide and Environmental Toxicology Section: Water Quality: Drinking Water**

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 7.0 Staff Toxicologist 3.0 Associate Toxicologist 1.0 Office Technician \$150/yr contract funds for specialized technical issues.	<p>Supervise staff, ensure productivity and timelines, coordinate with other programs, develop and manage contracts.</p> <p>Develop PHGs for chemicals in drinking water.</p> <p>Conduct literature searches and review toxicology data for about 90 different chemicals.</p> <p>Update and revise PHGs at least every five years or as new critical data are obtained.</p> <p>Proposition 50 implementation, prioritize and evaluate multi-million dollar grants applications.</p> <p>Develop Action Levels for chemicals in drinking water at the request DHS.</p> <p>Plan, organize, and conduct public workshops on PHGs, accept direct input in meetings with stakeholders, and respond to public comments and questions.</p> <p>Support/outreach to other boards, departments and offices, water utilities, companies, and the public.</p> <p>Develop fact sheets and other outreach materials, including formal presentations.</p>	<p>10 to 20 PHGs/yr (9 PY + additional support from other OEHHA staff). More than 20 risk assessments are currently in progress at different stages of production.</p> <p>1-2 public workshops/yr, usually on multiple chemicals.</p> <p>Review 1,000-2,000 scientific articles/yr.</p> <p>Internal reviews of 5 or more draft risk assessments/chemical/yr.</p> <p>Written responses to peer review and public comments on PHGs for an average of 10 or more responses/yr per PHG.</p> <p>Meetings with stakeholders several times/yr, upon their request to provide detailed information to OEHHA.</p> <p>Respond to 1 or more public requests for information/month (phone, email, Public Record Act requests, etc.).</p> <p>1 fact sheet/yr for selected chemicals of high public interest such as MTBE, arsenic, and perchlorate.</p> <p>Prepare and deliver 5 to 10 scientific presentations/yr.</p> <p>Provide technical support and consultation to DHS on criteria development, and review, evaluation and prioritization of grants applications for 2-10 clean drinking water management projects/yr.</p> <p>Develop PHGs on unregulated chemicals for 1-2 chemicals/yr)</p> <p>0-6 Action levels/year</p> <p>Clerical support- technical document production/revision and submission (includes word processing, logging and tracking, filing and other support functions.</p>	<p>Based on experience in conducting risk assessments for chemicals in drinking water, including 60 PHGs since 1996, and 12 Action Levels since 1991.</p> <p>Based on experience in meeting with a wide variety of external stakeholders, with dozens of presentations over several years.</p> <p>Based on experience in conducting six or more PHG workshops.</p> <p>Based on developing and administering contracts for PHGs since 1996.</p> <p>Proposition 50 is a new unfunded mandate starting in 2003 – workload is based on experience with similar health related evaluations.</p> <p>Based on experience with responses to requests for development of ALs and PHGs</p>

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**Table 19. Integrated Risk Assessment Section: Site Assessment: Screening Levels**

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Staff Toxicologist 1.0 Associate Toxicologist	<p>Additional work still needs to be done to meet the mandated requirements, including a report on the feasibility of establishing screening numbers to protect water quality and ecological resources for each of the chemicals (HSC §57008(b)(2)). In addition, once comments are received from the three workshops to be held on the screen numbers and the guidance, changes will be needed for the screening levels (HSC §57008(d)).</p> <p>It is anticipated that the Agency will ask for revisions of the screening numbers and for additional screening numbers (HSC §57008(d)). At this time Agency estimates 5 updates and 15 new screening numbers per year considering similar lists from the San Francisco Regional Water Board, with about 120 Environmental Screening Levels, and U.S. EPA, Region 9, with about 580 Preliminary Remediation Goals, which indicate more chemicals need to be assessed.</p>	<p>Determine the feasibility of establishing screening numbers to protect water quality and ecological resources. Revise screening numbers based on comments from workshops (0.2 PY)</p> <p>Work with DTSC and the Water Board to identify screening numbers that need reevaluation and then do the reevaluation (0.2PY).</p> <p>Work with DTSC and the Water Board annually to identify additional screening numbers needed (0.2 PY).</p> <p>Research and evaluate adverse effects to human health and safety of the new chemicals at 10 per year. Identify and analyze contaminant risk assessments prepared by federal or state agencies. Determine the feasibility of establishing screening numbers to protect water quality and ecological resources. Coordinate and conduct public meetings/hearings. Attend meetings. Respond to peer review and public comments (1.2 PY).</p> <p>Reevaluate the methodology used to develop the screening numbers. Changes have been occurring in the vapor intrusion model used in for some chemicals over the last decade and is expected to change in the future (0.2 PY).</p>	Requirements of the law and experience in doing the first 54 chemicals.



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**Table 20. Integrated Risk Assessment Section: Site Assessment: Schools**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>1.0 Senior Toxicologist  2.8 Staff Toxicologist  \$35K/yr contract funds for developing computer tool (spread sheet) to assist in using the guidance.  \$40K/yr contract funds to hire outside consultants and student assistants to assist in the update of the compilation of chemicals.  \$200K/yr contract funds to hire outside consultants and student assistants to assist in the literature search and review and criteria development  \$112K/yr contract funds to assist in obtaining valid exposure parameters for children.</p>	<p>Supervise Schools Project and related projects including program, personnel, and budget management, developing workplans, overseeing technical work production.</p> <p>Develop numerical health-based guidance for chemicals.</p> <p>Identify data gaps and uncertainties in the risk assessment guidance and actions needed to address them.</p> <p>Identify chemical contaminants that are commonly found at school sites and prioritize based on criteria.</p> <p>Develop criteria for child-specific exposures and physiological sensitivities for ranking chemical contaminants.</p> <p>Develop, publish, and update as needed a guidance document for use by Cal/EPA to assess exposures and health risks at existing and proposed school sites.</p>	<p>Supervision, oversight, review, contract management, and quality control (0.5 PY).</p> <p>Identify 5 chemical contaminants/yr that are commonly found at school sites and determined to be of greatest concern based on the child-specific criteria (0.2 PY).</p> <p>Conduct literature searches and review articles for priority chemicals. Develop 5 child-specific toxicity criteria/yr to be used with the risk assessment guidance based on a prioritization process (1.5 PY).</p> <p>Identify and addresses data gap issues for up to 5 chemicals/yr in the development of the school site risk assessment guidelines and toxicity criteria (0.2 PY).</p> <p>Identify and address 1-3 issues/yr in need for outside scientific expertise in the area of child activity patterns and physiological parameters. Contract for external services to address issues (0.2 PY).</p> <p>Conduct and prepare toxicological and research studies for the development of appropriate risk assessment guidance and toxicity criteria to assess human health risk to children from exposure to environmental contaminants. Develop, publish, maintain, and update risk assessment guidance documents (0.2 PY).</p>	<p>Based on actual work over the last 3 years.</p>

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**Table 21. Integrated Risk Assessment Section: Consumer Products: Fuels**

<b>Position(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>
1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Research Scientist I 1.0 Hazardous Substance Scientist 1.0 Assoc. Govt'l Prog. Analyst  \$25K/yr contract funds to provide consultant and student assistance in the acquisition, review and summary of literature for usability in the guidance and to help identify data gaps. \$50K/yr contract funds for consultants to assist in the review of the data based on the need for specialized expertise.	Develop work plans, establish priorities, coordinate multi-media evaluation for proposed fuel specification regulations and the California Land and Environmental Restoration and Reuse Act.  Evaluate toxicology studies, perform research, develop risk assessment models and soil screening levels.  Evaluate proposed regulation impact on public health or environment via all environmental pathways, including air, water, and soil.  Analyze data and perform in-depth evaluation of collected data; construct a framework for the multi-media, life-cycle evaluation methods, criteria, and guidelines.  Develop guidance for evaluating new fuel specifications to assist ARB.  Review data submissions (submitted to ARB) on specific fuel additives.  Investigate health impacts from using used motor oil as bunker fuel oil.	Supervising the activities of the Integrated Exposure Assessment Unit is a continuous effort (0.5 PY).  Perform literature search, identify, compile, and evaluate data for the development of a multimedia evaluation process for fuel specification regulations to determine adverse impact on public health or environment. Identify data weaknesses and gaps (2.5 PY).  Maintain and update guidance as needed.  Prepare 1- 3 reviews/yr summarizing the analysis framework addressing human exposure from primary and secondary pathways from multiple releases of contaminants associated with production, use, recycling, and disposal of motor vehicle fuels (1.0).  Investigate the potential health impacts from the use of used motor oil in bunker fuel to power ships in harbor and electrical generators. Evaluate the volume and geographical locations of motor oil/bunker fuel mixture used in the state. Model the extent of exposure. Analyze health risks relative to only the use of bunker fuel. Further evaluation of other uses of recycled oil (3.0 PY).	Based on experience from current activities and estimations from past activities.

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**Table 22. Integrated Risk Assessment Section: Site Assessment: General**

Position(s)	Workload	Workload Standard	Basis for Standard
2.0 Staff Toxicologist	<p>Provide toxicology and other scientific expertise to assist regional water quality control boards and regional integrated waste management boards.</p> <p>Provide toxicology and other scientific expertise to assist local governmental agencies in evaluating the cleanup of contaminated sites.</p> <p>Evaluate site-specific health risk assessment for appropriateness and adequacy.</p> <p>Reviews and evaluates risk assessment models and project components and advises on projects.</p>	<p>From 40 to 100 hours per site (1-1.6 PY) for reviewing and evaluating health risk site specific assessments from past, current, or future exposure to on-site workers, residents on or near sites of contamination, or possible future occupants of areas where contaminants may have migrated based on data supplied in site characterization and/or remedial action plans; and prepares comments and/or recommendations.</p> <p>Provide toxicological and technical assistance in the area of human health site risk assessment criteria and methodology (0.2 PY).</p> <p>Consult in the research and interpretation of human exposure information (0.2 PY).</p> <p>Review and evaluate 1-3 risk assessment models and project components/yr.</p> <p>Providing general consultation on projects is an ongoing effort (0.2 PY).</p>	<p>Based on experience and ongoing work on sites.</p> <p>Based on time sheets used to track time and bill agencies.</p>

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**Table 23. Environmental Justice: Border Coordination**

<b>Position(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>
1.0 Staff Toxicologist	<p>Assist Cal/EPA's Border Coordinator in general activities to promote scientific and technological environmental health capabilities and resources for the populations at the CA/Mexico border.</p> <p>Serve as the departmental liaison with local U.S. and Mexican governmental entities to facilitate and foster productive working relationships with the public, regulated community, environmental groups, Legislature and all levels of government.</p> <p>Provide risk assessment experience, training, and advice to professionals, officials, community leaders and others along the California/Mexico border.</p> <p>Participate in meetings, conferences and other activities that focus on pollution at the border.</p>	<p>Develop and conduct 1-3 bilingual (English/Spanish) trainings or workshops/yr in toxicology, risk assessment, and other applications in response to environmental and human health issues relating to pollution near the California/Mexico border (0.7 PY).</p> <p>Serve as points of contact to respond to inquiries and identify departmental documents applicable to risk evaluation or toxicology issues (0.1 PY).</p> <p>Attend state, national, and international meetings concerning border issues within the California/Mexico border region (0.2 PY).</p>	<p>All task workloads are based on the experience of the current Staff Toxicologist (Specialist) (Bilingual).</p>

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**Table 25. Integrated Risk Assessment Section: Consumer Products: Art Products**

<b>Position(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>
<p>1.0 Staff Toxicologist 1.0 Associate Toxicologist</p> <p>1.0 Staff Services Analyst \$100K/yr contract funds for UC laboratory research on exposure routes and uptake of powers, liquids and aerosols specific to art and craft materials.</p>	<p>Review and update existing of art or craft materials that cannot be used in grades K-6 and provide the Department of Education with a list of safe art and craft products.</p> <p>Consult with manufacturers of art supplies, artists' groups, health organizations, and other experts in the field and hold stakeholder and public meetings to exchange information to improve the program's effectiveness and efficiency.</p> <p>Review manufacturers' submissions of product information for completeness, accuracy and adequacy of analytical methods, conformity with Proposition 65 chemical lists, and to identify other problem compounds.</p> <p>Evaluate the exposure and toxicological assessments made by independent assessors for adequacy.</p> <p>Provide certification for new (or existing) products that conform to ASTM D-4236 product standards and the Federal Labeling of Hazardous Art Materials Act.</p>	<p>Review, research and revise art and crafts lists; gather information from manufacturers, nongovernmental organizations, and governmental organization, as well as products that fail to be certified (0.2 PY).</p> <p>Prepare a semiannual update of art and craft products that may be purchased for use in California schools (0.1 PY).</p> <p>Hold up to 6 stakeholder group and 2 public meetings/yr (0.2 PY).</p> <p>Review submission information on 100-200 products/yr (.9 PY).</p> <p>Certification of new products (number will depend on manufacturer's submissions) (0.2 PY).</p> <p>Through in-house literature review and out side research studies develop better ways to assess childhood exposure to art and craft materials used in schools (0.7 PY).</p> <p>Manage and track confidential and proprietary documents submitted for review in the Art Hazards Program by technical staff. Account for fee submissions and reviews done on art products.</p> <p>Develop and maintain analytical tools to ensure program fees are used effectively and efficiently (.7 PY).</p>	<p>Based on estimates of similar work conducted in the past and for other programs in OEHHA addressing health effects issues associated with consumer products.</p>

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**Table 26. Emerging Scientific/Chemical Issues: Environmental Protection Indicators for California**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>1.0 Research Scientist Supervisor I</p> <p>1.0 Research Scientist I</p> <p>1.0 Associate Governmental Program Analyst</p> <p>\$525K/yr contracts (8 IAA with other Cal/EPA BDOs, DHS, Resources Agency).</p> <p>\$225/yr contract for consulting services.</p>	<p>Manage EPIC program.</p> <p>Develop, maintain, update, and improve the environmental indicator system.</p> <p>Coordinate and collaborate with Cal/EPA BDOs, DHS, Resources Agency and other programs to collect or analyze environmental data.</p> <p>Provide technical support to Agency efforts to integrate environmental indicators into planning/management processes.</p> <p>Track, research, incorporate indicators and concepts from other environmental indicator systems.</p> <p>Prepare biannual reports and supplemental reports.</p> <p>Plan, convene, attend public workshops, scientific meetings, or conferences.</p> <p>Provide administrative support to the interagency workgroup and the scientific review panel.</p> <p>Manage data, GIS development/support, conference planning, graphics design, strategic planning.</p>	<p>Ongoing management and supervision of all EPIC-related work (0.5 PY).</p> <p>Develop, maintain and enhance EPIC indicator system and database. It is expected that 80-100 indicators/yr will be evaluated, and about 40-50 of these updated. To enhance the indicator system, 20-24 indicator systems maintained by regional entities, other states, the federal government, international bodies and research organizations will be tracked (0.6 PY).</p> <p>Coordinate with eight government agencies on continuous basis (0.25 PY).</p> <p>Prepare biannual and supplemental reports. In addition to the biannual report, 6-10 issue- or indicator-specific reports/yr are expected to be prepared (0.5 PY).</p> <p>Support to interagency workgroup and scientific review panel. The scientific review panel and the interagency group are expected to meet 2-4 times/yr (0.25 PY).</p> <p>Technical support to Agency (0.5 PY).</p> <p>Information dissemination and outreach (0.4 PY).</p>	<p>Experience managing EPIC program.</p> <p>Experience during the initial years of EPIC in identifying, selecting and developing indicators.</p> <p>Experience in preparing initial EPIC technical report and summary version for the public.</p> <p>Experience working external stakeholders and interagency advisory group. Experience with the Cal/EPA "Results-Based Management System" Project.</p> <p>Experience in convening and attending public/scientific meetings and conferences.</p> <p>Experience with education and outreach activities.</p> <p>Experience providing administrative support for internal and external programs and collaborators.</p>

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**Table 31. Reproductive and Cancer Hazard Assessment Section: Cancer Hazard Identification**

Position(s)	Workload	Workload Standard	Basis for Standard
0.5 Senior Toxicologist 2.0 Staff Toxicologist  1.0 Associate Toxicologist 1.0 Research Scientist II 1.0 Office Technician 1.0 Office Assistant \$125K/yr contract funds for evaluating exposure and toxicological data for prioritizing chemicals, and conducting literature searches for hazard identification documents.	<p>Perform all technical work required for administratively listing chemical carcinogens under Proposition 65, including technical and supporting documentation and required public notices.</p> <p>Prioritize chemicals for evaluation and when necessary evaluate and revise, as appropriate, the prioritization process.</p> <p>Review epidemiology and toxicology data relevant to cancer hazard identification and prepare documentation for consideration by the Carcinogen Identification Committee (CIC).</p> <p>Present findings at CIC meetings.</p> <p>Organize and convene public workshops, comment periods, and respond to public comments.</p> <p>Revise cancer hazard identification guideline documents as new scientific understanding develops that significantly impacts existing guidance.</p> <p>OT prepares complex documents, process and monitor program expenses, and track out-of-state or in-state travel, expense claims, equipment repairs, controlled correspondence, bill analyses, etc.</p>	<p>For administrative listing, review 20-50 technical reports/yr submitted by authoritative bodies, 20-50 state or federal labels/yr formally required for listing, and 1-5 candidate chemicals listed under the Labor Code; develop 5-15 chemical descriptions/yr supporting listing, identifying 10-35 chemicals for listing and noticing, responding to comments from 10-60 reviewers/yr, hold 5-30 meetings/yr with interested parties.</p> <p>The prioritization process requires review of data for 50-250 chemicals/yr, 50-250 supporting documents prepared (including public review drafts and final documents), and responses to comments received from 8-20 public reviewers per 50 prioritized chemicals.</p> <p>Organize and convene 1-3 public workshops and 2-12 meetings/yr with interested parties for prioritization process.</p> <p>Prioritization procedure revision requires 4-6 CIC prioritization workgroup meetings and responses to comments from 4-10 reviewers per policy document.</p> <p>Annually prepare 2-7 cancer hazard identification documents (including public review drafts and final documents); review 1-2 data call-ins, 2-10 submissions by interested parties; hold 2 CIC meetings with multiple presentations and 1-10 meetings with interested parties.</p> <p>Cancer hazard identification guidelines revision requires addressing 1-2 complicated scientific issues/yr, holding 1-4 meetings/yr with external parties and 1-2 public workshops/yr, and revision and peer review of guidelines.</p> <p>Assist program staff in format requirements for technical reports and legislative reports.</p> <p>Keeping inventory, ordering of supplies, equipment.</p>	<p>Based on 13 years of experience putting chemicals forward for listing based on administrative listing mechanisms.</p> <p>Based on 6+ years of experience developing several processes for the prioritization of candidates for listing consideration under Proposition 65, and 6+ years of experience using the current prioritization process.</p> <p>Based on 15+ years of experience in conducting and developing documentation for cancer hazard identification under Proposition 65.</p> <p>Based on previous experience developing guidance for cancer hazard identification.</p>

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<b>Table 31 (concluded). Reproductive and Cancer Hazard Assessment Section: Cancer Hazard Identification</b>			
Position(s)	Workload	Workload Standard	Basis for Standard
	OA provides general office support as filing, ordering supplies, tracking documents, copying, mailing, etc.	repairs, and tracking expenses in an ongoing effort. Copying documents, articles, and filing, microfiche of articles, and documents as required, and other general office support. Back up of the front desk reception, which includes postage on mail, and other clerical duties.	



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**Table 32. Reproductive and Cancer Hazard Assessment Section: Development of Cancer Regulatory Numbers and Technical Support to the Attorney General**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>.25 Senior Toxicologist</p> <p>2.0 Staff Toxicologist</p> <p>1.0 Biostatistician IV</p> <p>.5 Assoc. Toxicologist</p> <p>0.5 Research Scientist II</p> <p>1.0 Senior Environmental Research Scientist Specialist</p> <p>\$75K/yr contract funds for pharmacokinetic and biologically based modeling.</p>	<p>Develop No Significant Risk Levels (“safe harbors”), which are Proposition 65 regulations for carcinogens.</p> <p>Review and evaluate available toxicology and epidemiology data on identified carcinogens, determine suitability of data for estimating cancer risks, prioritize carcinogens for regulation and publishing in <i>Status Report</i>.</p> <p>Conduct dose-response analysis on the highest quality data sets available for selected carcinogens.</p> <p>Determine most appropriate models for estimating cancer risk, considering several complex scientific factors.</p> <p>Based on cancer dose-response assessment, derive NSRLs for listed carcinogens, prepare supporting documentation for each new NSRL, submit to OAL, respond to public comments, revise as appropriate, and adopt final regulation.</p> <p>Provide scientific and technical guidance to the Attorney General’s Office.</p>	<p>Conduct dose response analyses and propose 8-16 regulations/yr.</p> <p>Prepare and submit to OAL1-4 initial and final statements of reasons /yr, corresponding to 8-16 regulations.</p> <p>Hold 1-2 public hearings/yr.</p> <p>Hold 1-10 meetings/yr with interested parties.</p> <p>Routine updating and release of <i>Status Report</i>1-3 times per year.</p> <p>Technical support to Attorney General includes 4-20 requests for assistance/yr and preparation of 1-10 declarations, testimony, or other formal documentation/yr.</p>	<p>Based on the most recent 2 years of experience developing safe harbor regulations for listed carcinogens.</p> <p>Based on 15+ years of experience providing technical support to the Attorney General on Proposition 65 issues.</p>

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**Table 33. Reproductive and Cancer Hazard Assessment Section: Cancer Safe Use Determinations and other Cancer Analyses for Proposition 65 and Other OEHHA Programs**

Position(s)	Workload	Workload Standard	Basis for Standard
.25 Senior Toxicologist  1.5 Staff Toxicologist .5 Assoc. Toxicologist  0.5 Research Scientist II	<p>Perform technical analyses in response to requests for safe use determinations (SUD) for listed carcinogens.</p> <p>Perform technical analyses in response to petitions on cancer issues.</p> <p>Develop interpretive guidelines for Proposition 65.</p> <p>Respond to public comments.</p> <p>Provide technical support on cancer risk assessment and hazard identification issues to other OEHHA scientific programs.</p>	<p>OEHHA receives 2-5 submissions and SUD requests/yr for carcinogens. In developing SUDs, 1-6 pre-submission meetings/yr with interested parties are required, including staff preparation for these meetings. Hold 0-1 public workshops and/or 1-5 public hearings/SUD.</p> <p>OEHHA receives 1-5 submissions and interpretive guideline requests/yr. In preparing the guidelines, 1-3 pre-submission meetings with interested parties and staff preparation as well as 0-2 public workshops are required/yr.</p> <p>OEHHA receives 1-3 petitions on Proposition 65 carcinogens/yr and each petition addresses 1-6 complicated technical issues. In preparing responses, 1-3 pre-petition meetings/yr and staff preparation are required. Hold 0-2 public workshops/yr.</p> <p>Annual provision of consultation to other OEHHA programs on cancer risk assessment issues includes 4-10 requests for document review (e.g., PHGs), 1-3 requests for document preparation, 3-8 requests for meetings support, and 4-8 requests for draft inserts for OEHHA reports.</p>	<p>Based on 6+ years of experience evaluating SUD requests and projected increase in the number of future requests from the regulated community.</p> <p>Based on past experience and recent increased interest from the regulated community in seeking interpretive guidelines.</p> <p>Based on 8+ years of experience receiving petitions on cancer issues.</p> <p>Based on past 5 years of experience providing consultation to other OEHHA programs.</p>

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**Table 34. Reproductive and Cancer Hazard Assessment Section: Reproductive and Developmental Toxicity Hazard Identification**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>.5 Senior Toxicologist</p> <p>2.0 Staff Toxicologists</p> <p>1.0 Associate Toxicologists</p> <p>0.25 Biostatistician IV</p> <p>0.5 Research Scientist III</p> <p>1.0 Research Scientist II</p> <p>\$125K/yr contract funds for evaluating exposure and toxicological data for prioritizing chemicals, and conducting literature searches for hazard identification documents.</p>	<p>Perform all technical work required for administratively listing chemical reproductive toxicants under Proposition 65, including technical and supporting documentation and public notices.</p> <p>Prioritize chemicals for evaluation and when necessary evaluate and revise the prioritization process.</p> <p>Review epidemiology and toxicology data relevant to reproductive toxicity hazard identification and prepare documentation for consideration by the Developmental and Reproductive Toxicant Identification Committee (DART).</p> <p>Present findings at DART meetings.</p> <p>Organize and convene public workshops, comment periods, and respond to public comments.</p> <p>Revise reproductive toxicity hazard identification guideline documents as new scientific information emerges.</p> <p>Prepare reviews of emerging or controversial issues in reproductive and developmental toxicology.</p>	<p>For administrative listing, review 20-50 technical reports/yr submitted by authoritative bodies, 20-50 state or federal labels/yr formally required for listing, and 1-5 candidate chemicals listed under the Labor Code; develop 5-15 chemical descriptions/yr supporting listing, identifying 10-35 chemicals for listing and noticing, responding to comments from 10-60 reviewers/yr, hold 5-30 meetings/yr with interested parties.</p> <p>The prioritization process requires review of data for 50-250 chemicals/yr, 50-250 supporting documents prepared (including public review drafts and final documents), and responses to comments received from 8-20 public reviewers per 50 prioritized chemicals.</p> <p>Organize and convene 1-3 public workshops and 2-12 meetings/yr with interested parties for prioritization process.</p> <p>Prioritization procedure revision requires 4-6 DART prioritization workgroup meetings and responses to comments from 4-10 reviewers per policy document.</p> <p>Annually prepare 2-7 reproductive toxicity hazard identification documents (including public review drafts and final documents); review 1-2 data call-ins, 2-10 submissions by interested parties; hold 2 DART meetings with multiple presentations and 1-10 meetings with interested parties.</p> <p>Reproductive toxicity guidelines revision requires addressing 1-2 complicated scientific issues/yr, holding 1-4 meetings/yr with external parties and 1-2 public workshops/yr, and revision and peer review of guidelines.</p> <p>Prepare 1-3 issue papers/yr.</p>	<p>Based 14+ years experience in preparation of reproductive toxicity HIDs documents and guidelines.</p> <p>Based on several examples of development of prioritization documents.</p> <p>Based on 14+ years experience in holding public meetings.</p>

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**Table 35. Reproductive and Cancer Hazard Assessment Section: Development of Reproductive Toxicity Regulatory Numbers and Technical Support to the Attorney General**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>.25 Senior Toxicologist  1.5 Staff Toxicologist    1.0 Biostatistician IV  0.25 Research Scientist III    \$75K/yr contract funds for dose response analysis and literature searches to support such analyses</p>	<p>Develop Maximum Allowable Dose Levels ("safe harbors" or MADLs), which are regulations for Proposition 65 reproductive toxicants.</p> <p>Review and evaluate available toxicology and epidemiology data on identified reproductive toxicants, determine the suitability of the data for identification of the most sensitive NOAELs of sufficient quality, prioritize reproductive toxicants for regulation and publish this in the <i>Status Report</i>.</p> <p>Based on reproductive toxicity dose-response assessment, derive MADLs for listed reproductive toxicants, and prepare supporting documentation for each new MADL.</p> <p>Submit documentation to OAL, respond to public comments, revise as appropriate, and adopt final regulation.</p> <p>Provide scientific and technical guidance to the Attorney General's Office.</p>	<p>Conduct dose response analyses for preparation of MADLs and propose 5-15 new regulations/yr.</p> <p>Prepare and submit to OAL1-4 initial and final statements of reasons /yr, corresponding to 5-15 regulations.</p> <p>Hold 1-2 public hearings/yr.</p> <p>Hold 1-10 meetings/yr with interested parties.</p> <p>Routine updating and release of <i>Status Report</i>1-3 times per year.</p> <p>Technical support to Attorney General includes 4-20 requests for assistance/yr and preparation of 1-10 declarations, testimony, or other formal documentation/yr.</p>	<p>Based on the most recent 2 years of experience developing MADLs for reproductive toxicants.</p> <p>Based on 14+ years of experience providing technical support to the Attorney General on Proposition 65 issues.</p>

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**Table 36. Reproductive and Cancer Hazard Assessment Section: Reproductive Toxicity Safe Use Determinations and other Reproductive Toxicity Analyses for Proposition 65 and Other OEHHA Programs**

Position(s)	Workload	Workload Standard	Basis for Standard
.25 Senior Toxicologist  1.0 Staff Toxicologist  0.25 Biostatistician IV 0.25 Research Scientist III	Perform technical analyses in response to requests for safe use determinations (SUD) for listed reproductive toxicants.  Perform technical analyses in response to petitions on reproductive toxicity issues.  Develop interpretive guidelines for Proposition 65.  Respond to public comments.  Provide technical support on reproductive toxicity risk assessment and hazard identification issues to other OEHHA scientific programs.	OEHHA receives 2-5 submissions and SUD requests/yr for reproductive toxicants. In developing SUDs, 1-6 pre-submission meetings/yr with interested parties are required, including staff preparation for these meetings. Hold 0-1 public workshops and/or 1-5 public hearings/SUD.  OEHHA receives 1-5 submissions and interpretive guideline requests/yr. In preparing the guidelines, 1-3 pre-submission meetings with interested parties and staff preparation as well as 0-2 public workshops are required/yr.  OEHHA receives 1-3 petitions on Proposition 65 reproductive toxicants/yr and each petition addresses 1-6 complicated technical issues. In preparing responses, 1-3 pre-petition meetings/yr and staff preparation are required. Hold 0-2 public workshops/yr.  Annual provision of consultation to other OEHHA programs on reproductive toxicant risk assessment issues includes 4-10 requests for document review (e.g., PHGs), 1-3 requests for document preparation, 3-8 requests for meetings support, and 4-8 requests for draft inserts for OEHHA reports.	Based on 6+ years of experience evaluating SUD requests and projected increase in the number of future requests from the regulated community.  Based on past experience and recent increased interest from the regulated community in seeking interpretive guidelines.  Based on 5+ years of experience receiving petitions on reproductive toxicity issues.  Based on past 5 years of experience providing consultation to other OEHHA programs.

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**Table 37. Emerging Scientific/Chemical Issues: Gasoline-Associated Air Pollution: Characterization of Cancer and Non-Cancer Health Effects**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>1.0 Senior Toxicologist  2.0 Staff Toxicologists  1.0 Research Scientist Supv. I  1.0 Research Scientist II</p> <p>\$50K/yr contract funds for identifying additional atmospheric transformation products of gasoline exhaust and emissions, for estimating gasoline-attributable concentrations of atmospheric transformation products, and for evaluating exposure and toxicological data on air pollutants associated with gasoline use.</p>	<p>Characterize the cancer and non-cancer health effects of gasoline-associated air pollution in California.</p> <p>Review the chemical and exposure literature and consult with experts to identify air pollutants associated with gasoline use in California.</p> <p>Identify hazards (cancer and non-cancer) of air pollutants associated with gasoline use.</p> <p>Develop and apply toxicity criteria for gasoline-related air pollutants and specific health endpoints (cancer, respiratory toxicity, cardiotoxicity, etc.) to estimated gasoline-attributable pollutant concentrations for a given year and region.</p> <p>Characterize the change in health risks associated with gasoline use to Californians over time.</p>	<p>Estimate gasoline-attributable concentrations of air pollutants on a yearly basis for individual regions within California, based on analysis of emission inventory data and air monitoring data from the California Air Resources Board and other sources.</p> <p>Review 5-20 air toxicants/yr.</p> <p>Review 5-10 toxicants/yr in other environmental media.</p> <p>Review and evaluate 1-2 mixtures/yr.</p> <p>Analyze 1-3 years of air monitoring data to determine gasoline attributable pollutant concentrations.</p> <p>Develop 1-8 toxicity criteria/yr.</p> <p>Perform 2-15 risk calculations/yr.</p> <p>Prepare and submit biannual report characterizing cancer and non-cancer hazards from gasoline associated air pollutants based upon year-specific air monitoring data.</p>	<p>Based on 3+ years experience conducting reviews of the chemical, exposure, toxicology, and epidemiology literature on gasoline associated air pollutants.</p> <p>Based on 2+ years of experience analyzing California air monitoring data and modeled air concentration estimates, emission inventories, etc.</p> <p>Based on extensive experience conducting dose-response assessments for carcinogens under Proposition 65, and 2 years of experience developing toxicity criteria based on chronic respiratory effects of multiple gasoline-associated air pollutants.</p> <p>Based on experience in other programs (e.g. TAC, PHG), which characterizes cancer and non-cancer health effects.</p>

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**Table 38. Reproductive and Cancer Hazard Assessment Section: Children's Cancer Guidelines and Assessment**

Position(s)	Workload	Workload Standard	Basis for Standard
<p>2.0 Staff Toxicologists  1.0 Research Scientist III  1.0 Biostatistician IV  1.0 Public Health Medical Officer II  \$400K/yr contract funds conducting workshops, expanding the data base, developing regulatory levels protection of infants and children</p>	<p>Develop guidelines for assessing risk from childhood exposure and revise cancer risk assessment guidelines to be more protective of the fetus, infant, and child.</p> <p>Develop regulatory and advisory levels that account for greater childhood sensitivity.</p> <p>Review, evaluate, and analyze human and animal studies of cancer resulting from exposures at different life stages and compare cancer risk associated with exposures during the life stages.</p> <p>Review new data on cancer mechanisms and age-related differences in exposure and tumor incidence.</p> <p>Develop, validate, and refine cancer dose-response methodology.</p> <p>Develop age-specific dose-effectiveness factors for carcinogens acting by different mechanisms.</p> <p>Respond to public comments.</p> <p>Publish and present findings.</p>	<p>Review and compile data from 200-300 scientific articles/yr.</p> <p>Enter 50-100 cancer data sets/yr.</p> <p>Conduct 50-75 cancer dose-time-response analyses/yr.</p> <p>Test 5-7 cancer dose response models/yr for 40-70 chemical carcinogens.</p> <p>In developing guidelines for greater childhood sensitivity to cancer, consider 10-15 criteria with review of 1-3 criteria/r. Hold 1-2 public workshops/yr.</p> <p>In developing cancer guidance levels protective of children, prepare 5-10 draft documents/yr considering 5-8 proposed regulations depending on volume and complexity of literature analyzed and the volume and complexity of public comments.</p> <p>Submit to OAL 1-2 initial and final statement of reasons /yr.</p> <p>Hold 1-2 public hearings/yr.</p> <p>Hold 2-6 meetings with interested parties/yr.</p>	<p>Based on 3 years of experience reviewing, evaluating, and extracting data from scientific articles presenting cancer findings following carcinogen exposure at different life stages and pilot analyses of data sets on the model carcinogens ENU and DMBA.</p> <p>Based on extensive experience analyzing issues of mechanism of action of carcinogens in hazard identification documents, and previous experience in developing hazard identification guidance.</p> <p>Based on extensive experience developing safe harbors for Proposition 65 carcinogens.</p>

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**Table 44. External Affairs: Proposition 65 Implementation**

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Hazardous Substances Scientist 1.0 Associate Governmental Program Analyst	<p>Schedule and provide administrative support for SAB meetings, and for public hearings, workshops, and forums.</p> <p>Draft and submit legal notices announcing public comment periods, chemical listings and other developments of interest to the public.</p> <p>Receive, compile, maintain and distribute copies of public comments received on specific Proposition 65 matters.</p> <p>Promulgate regulations that further the purpose of Prop 65. Staff the Proposition 65 telephone number and respond to public and stakeholder inquiries.</p> <p>Provide program support and coordination between RCHAS, OEHHA counsel and the Executive Office.</p> <p>Maintain and update records on chemicals listed, considered for listing, or prioritized for consideration of listing.</p>	<p>Reserve and set up meeting rooms and arrange for court reporting services for approximately 10 public meetings/yr.</p> <p>Draft 25-50 legal notices per year for publication in the California Regulatory Notice Registry and posting on OEHHA's Web site.</p> <p>Receive, file and disseminate comment letters and attachments covering several dozen chemicals and totaling several thousand pages over a one-year period.</p> <p>Draft regulatory language, Statements of Reasons and related regulatory documents for 1-3 regulatory packages/yr.</p> <p>Handle approximately 3,800 phone calls/yr from the general public and stakeholders.</p> <p>Set up and attend approximately 24 meetings/yr to report developments to, and receive input and direction from, RCHAS, OEHHA counsel and the Executive Office.</p> <p>Continuously maintain files and develop electronic database for 750 listed chemicals and several hundred additional chemicals that are potential candidates for listing.</p>	<p>Based on experience. There is a minimum of 2 Scientific Advisory Board meetings annually, plus additional OEHHA public meetings.</p> <p>Based on experience in managing Proposition 65 workload.</p> <p>Based on OEHHA commitment to enact 25-40 safe harbor numbers annually in regulation, plus OEHHA commitment to clarify and revise existing regulations.</p> <p>Based on experience in staffing the phone line.</p> <p>OEHHA management holds 2 staff meetings monthly to coordinate Proposition 65 activities.</p>





**APPENDIX D**

**WORKLOAD OUTPUT**

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**  
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**WORKLOAD OUTPUT**

**Table 1. Air Toxicology and Epidemiology Section: Toxic Air Contaminants (Including Children's Health)**

<b>Existing Position(s)</b>	<b>Current Workload Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
1.0 Senior Toxicologist 5.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Research Scientist II  1.0 Public Health Medical Officer II	<p>Beginning 2005, annually evaluate up to 10 existing toxic air contaminants, provide threshold exposure levels and nonthreshold health values, specifically protective for infants and children</p> <p>Beginning 2005, prepare report amending the list of TACs that may disproportionately impact children/year.</p> <p>Based on past five years, able to develop 0.2 health effects assessments including quantitative risk assessment for candidate TAC/year.</p> <p>Provide technical support to ARB for listing and control measure development.</p>	1.0 Senior Toxicologist 5.0 Staff Toxicologist 3.0 Associate Toxicologist 1.0 Research Scientist II  1.0 Public Health Medical Officer II \$360K/yr contract funds for specialty literature searches and scientific symposia.	<p>Beginning 2004, annually evaluate at least 15 existing toxic air contaminants, provide threshold exposure levels and nonthreshold health values, specifically protective for infants and children (HSC 39669.5 (c)).</p> <p>Beginning 2004, prepare annual report amending the list of TACs that may disproportionately impact children/yr (HSC 39669.5 (c)).</p> <p>Develop 0.5-1 health effects assessments including quantitative risk assessment for candidate TAC/yr. This is to address the current backlog of 18 candidate Toxic Air Contaminants to be evaluated (HSC 39660).</p> <p>Provide technical support to ARB for listing and control measure development (HSC 39660, HSC 39665).</p>

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**Table 2. Emerging Scientific/Chemical Issues: Fuels Assessment (Including Children's Health)**

<b>Current Position(s)</b>	<b>Current Workload Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
1.0 Public Health Medical Officer II	Evaluate impact of emissions on air pollutants, including ozone forming compounds, particulate matter, toxic air contaminants, and greenhouse gases for motor vehicle fuel. Current level of effort is to conduct one study every 5-6 years. This may result in adopting a new fuel regulation prior to full understanding of the health implications of an existing regulation	1.0 Public Health Medical Officer II 1.0 Associate Toxicologist 2.0 Research Scientist II	Evaluate impact of emissions on air pollutants, including ozone forming compounds, particulate matter, toxic air contaminants, and greenhouse gases for motor vehicle fuel (HSC 43830.8 (b)). The ARB will likely be requesting OEHHA to evaluate 6 fuel additives or minor reformulations per year, and one major reformulation per year, which will require a more intensive analysis. Reasonable level of effort would be to conduct one study every 2-3 years in order to complete 1 to 2 studies on an existing vehicle fuel prior to adoption of a new fuel regulation.

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**Table 3. Air Toxicology and Epidemiology Section: Criteria Air Pollutants (Including Children's Health)**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
1.0 Research Scientist Supervisor II 2.0 Research Scientist II 0.5 Research Scientist I	<p>Develop 1 health recommendation report every 2-3 years for an Ambient Air Quality Standard that is protective of infants and children. This is being conducted without the input of a physician to assure protectiveness of children.</p> <p>Conduct 1 epidemiological investigation every five years, to assess exposure patterns, special susceptibility, and interaction of multiple air pollutant on infants and children.</p>	1.0 Research Scientist Supervisor II 3.0 Research Scientist II 0.5 Research Scientist I 1.0 Staff Toxicologist 2.0 Public Health Medical Officer II \$250K/yr contract funds to plan, design, and conduct epidemiology studies.	<p>Develop recommendations for Ambient Air Quality Standards, including report on health impacts, for at least 1 criteria air pollutant per year that is protective of infants and children (HSC 39606). Statute requires OEHHA to assess the following factors for infants and children: exposure patterns, special susceptibility, and interaction of multiple air pollutant (HSC 39606 (b)).</p> <p>Conduct 1 epidemiological investigation every 2 years to fill data gaps needed to properly assess exposure patterns in California, special susceptibility, and interaction of multiple air pollutant in California on infants and children. This is considered a reasonable level of effort to fill data gaps needed to be addressed for Ambient Air Quality Standards (HSC 39606, 39606 (b)).</p>

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**Table 4. Air Toxicology and Epidemiology Section: Air Toxic Hot Spots Act and Exposure Assessment (Including Children's Health)**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Research Scientist II	<p>Update risk assessment guidelines every 5 years to incorporate new information on health effects, exposure assessment and infants and children.</p> <p>Review 2-5 health risk assessments per year for hot spot facilities.</p> <p>Provide technical assistance to the Air Pollution Control Districts and ARB to interpret 5-10 risk assessments and 0 trainings per year.</p>	1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 2.0 Research Scientist II 1.0 Research Scientist I \$90K/yr contract funds for specialty literature searches.	<p>Under the Toxic Air Contaminant laws, OEHHA is required to assess exposure patterns of infants and children, special susceptibilities to TACs for infants and children, and effects of exposure to multiple air contaminants on infants and children (HSC 39669.5(a)). The AIR Toxics Hot Spots Act requires facilities to conduct risk assessments for airborne emissions of TACs using OEHHA guidelines. Update risk assessment guidelines to ensure adequate assessment of risks to infants and children every two years to incorporate the rapidly evolving scientific information on health effects and exposure assessment for infants and children (HSC 44360).</p> <p>Historically have reviewed 5 to 10 health risk assessments per year for hot spot facilities (HSC 44361).</p> <p>Provide technical assistance to the Air Pollution Control Districts and ARB to interpret 10-50 risk assessments and 2 trainings per year (HSC 44361). The exact number of risk assessments received depends on many unpredictable factors. The air</p>

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**Table 4 (concluded). Air Toxicology and Epidemiology Section: Air Toxic Hot Spots Act and Exposure Assessment (Including Children's Health)**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
			Districts predict that a minimum, OEHHA will need to review more than 15 per year over the next several years (So. Coast Air District is expecting 50 reviews). As the economy continues to improve, risk assessment reviews will increase due to facility expansions. Also, the number is likely to increase as the diesel cancer risk number is applied by more air Districts.

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**Table 5. Air Toxicology and Epidemiology Section: Indoor Air**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
1.0 Staff Toxicologist 1.5 Research Scientist I	Develop 1 indoor air RELs per year. Review 1 indoor air document per year. Address 10-30 ARB and public inquiries per year. Provide technical support to ARB and CIWMB on indoor air risk assessment.	1.0 Staff Toxicologist 1.0 Associate Toxicologist 1.5 Research Scientist II	Based on historical requests, develop 3 indoor air RELs per year (HSC 39660.5(d)) in evaluating indoor air quality and by CIWMB (Public Resources Code Section 42642; Executive Orders D-16-00 and S-20-04) in evaluating environmentally preferable products and ensuring healthy indoor environments while maximizing use of recycled materials in building products. Review 2 indoor air documents per year. Address 10-30 ARB and public inquiries per year. Provide technical support to ARB and CIWMB on indoor air risk assessments (HSC 39660.5).



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**Table 6. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Community Health Investigations**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
0.1 Research Scientist Supervisor I 0.4 Public Health Medical Officer III	<p>In 2003, began developing standardized criteria, guidelines, and protocols for conducting community pesticide exposure surveys and epidemiological studies. These evolve slowly because of diminished staffing and resources, specifically in epidemiology. These protocols are to provide a public health approach to community pesticide exposure episodes, while DPR focuses on regulatory compliance and enforcement. These approaches require complimentary effort and coordination to assure clarity of purpose.</p> <p>Because of budget and staffing reductions over the last few years, OEHHHA has greatly reduced the level of epidemiologic and medical consultation support to local health officers and communities affected by pesticide drift episodes and other pesticide exposure events. With a diminished level of staffing, OEHHHA has reduced the level of medical and epidemiological analysis on illness reports and reviews only the most egregious events.</p>	0.1 Research Scientist Supervisor I 0.5 Public Health Medical Officer III 0.15 Public Health Medical Officer II 1.0 Research Scientist II 0.5 Staff toxicologist \$150K/yr contract funds for software development, training and distribution. Sit visits, field investigation. Students, translators, local communications needs for field studies.	<p>Develop guidelines and procedures for epidemiological and statistical analysis of communities exposed to pesticides (HSC §105210). Develop and maintain software for conducting cost-effective standardized epidemiological field investigations that integrate the pesticide illness and pesticide use reporting systems. Distribute field application software and provide training to 5 local health and agricultural agencies for use of scientific methods and application software (HSC §105210).</p> <p>Consult with 10 county agricultural commissioners (CAC) and the local health officer about the most serious outbreaks of pesticide poisonings and respond to requested assistance with the necessary staff and technical assistance to conduct an epidemiologic investigation (HSC §105210).</p> <p>Conduct 1 epidemiology study per year to assist Local Health Officer (LHO) (HSC §105210). With identified required positions for this mandate, this is a minimal level of effort given the complexity of the task, stakeholder input, and community and public health value. Contract funds are necessary for acquiring epidemiological and biostatistical software, local training, translators, questionnaire development, and local medical team support.</p>

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**Table 6 (concluded). Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Community Health Investigations**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
	<p>In 2003, began developing software applications for field study application.</p> <p>Provide toxicological and epidemiological telephone consultations to 3 local health officers and county agriculture commissioners per year.</p>		<p>Tremendous population and housing growth, resulting in expanding agriculture-urban interface, is driving the increasing number of requests for epidemiological support to local agencies and communities. With the identified required positions, OEHHHA will be able to respond to episodes like those that occurred last year in Lamont, San Diego, and Kern counties where large number of community and worker populations were made ill from pesticide releases.</p>

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**Table 7. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Risk Assessment**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
<p>0.2 Research Scientist Supv. I 1.5 Staff Toxicologist</p>	<p>Typically, peer review 3-4 of DPR's Risk Characterization Documents per year. With of budget and staffing reductions over the last few years, OEHHA has greatly reduced the depth of toxicological analysis and peer review of pesticides being considered for new or modified registration and use.</p> <p>Review 1 Toxic Air Contaminants documents for pesticides per year and produce findings on TACs per year.</p> <p>Review 2 toxicological study data waiver requests from pesticide registrants per year</p> <p>Consult with DPR in prioritizing the array of pesticides that should undergo risk assessment based on established criteria.</p>	<p>1.0 Senior Toxicologist 0.2 Research Scientist Supv. I 3.5 Staff Toxicologist</p>	<p>Historically, DPR completes 3 to 4 RCDs or risk assessments per year. OEHHA has met its mandates to provide critical peer review that is necessary for scientific merit and credibility. This year, DPR stated that they intend to complete 17 risk assessments. With identified requires resources, OEHHA will meet its peer review obligations in a timely manner and will have the capacity to consult on and resolve scientific differences and interpretations of data. (HSC §59004 and FAC §13129).</p> <p>With required resources to meet it scientific mandates, OEHHA, will address large gaps in public health issues and policies, such as cumulative risk from multiple sources, toxicologic criteria for evaluating early in life exposures, gene-environment interactions, and technical assessment of exposure assessment reports of pesticide in water, air, food, and consumer products. Based upon DPR's listing of the 17 risk assessments planned, OEHHA will likely review at least 4 pesticide Toxic Air Contaminants documents and produce technical findings for consideration by Scientific Review Panel and public information. In consultation with DPR, ARB, and the public, prioritize registered pesticides and generate a list of 10 pesticides to undergo risk assessment annually (HSC §59004 and FAC §13129). This level of effort is reasonable to address the backlog of several hundred risk assessments. (FAC §14022-23).</p> <p>Review all pesticide toxicology data waiver requested per year (typically 2 to 10 per year) (FAC §13131.2).</p>

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**Table 8. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Occupational and Public (Community/Residential) Health and Safety**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.2 Research Scientist Supervisor I 0.5 Staff Toxicologist 0.4 Public Health Medical Officer II 0.1 Public Health Medical Officer III	<p>Review and evaluate the scientific and public health basis for 3 pesticide worker health and safety regulations per year. Exercise joint and mutual responsibilities for the development of occupational regulations relating to pesticides.</p> <p>Evaluate 2 pesticide occupational exposure research proposals per year.</p> <p>Review 2 air monitoring and exposure studies per year.</p>	0.2 Research Scientist Supervisor I 1.5 Staff Toxicologist 0.25 Public Health Medical Officer II	<p>Review and evaluate the scientific and public health basis for 3 pesticide worker health and safety regulations per year. Exercise joint and mutual responsibilities for the development of occupational regulations relating to pesticides, such as for methyl bromide use, farm worker hazard communication standards, respiratory protection, and blood cholinesterase monitoring (FAC §12980).</p> <p>Historically, OEHHA evaluates an average of 8 occupational exposure research proposals per year; the number is determined by registrant research requirements to register new or modify product use (Title 3CCR §6710). Develop standard review criteria for assurance of scientific merit, integrity, and protection of human subjects in research. This level of effort will address the workload necessary to develop bioethical research standards in human testing studies that do not currently exist in Cal/EPA.</p> <p>About 11,000 pesticides products, comprised of over 900 active ingredients are</p>

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**Table 8 (concluded). Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Occupational and Public (Community/Residential) Health and Safety**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
			<p>registered, dozens of which are potential toxic air contaminants, as defined in FAC §14022. DPR consults with OEHHA and ARB for TAC listing determination. Only 2 to 4 pesticides are reviewed and evaluated, but dozens more wait to be considered. With required positions, OEHHA will inform the process on high priority TAC candidates, and thereby meet its minimal mandates.</p> <p>DPR has 90 days after receiving scientific data from OEHHA and ARB to complete their evaluation. With required positions OEHHA will provide data from dozens of toxicological and air monitoring studies conducted each year by ARB, DHS, academia, registrants, and others.</p> <p>Historically, OEHHA conducts up to 2 health-related studies per year and address up to 6 special risk assessment issues per year (HSC 59004). Given the 11,000 registered pesticide products in California with more than 900 individual active ingredients, this level of effort would address the minimal annual public health and safety workload in this area.</p>

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**Table 9. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Medical Supervision and Physician Training**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.2 Research Scientist Supervisor I 0.6 Public Health Medical Officer II 0.4 Public Health Medical Officer III 0.5 Staff Toxicologist	<p>Annually provide detailed medical training to 100 physicians/health professionals on pesticide poisoning-recognition, management, and reporting.</p> <p>Review and update training medical training syllabus and 2 curriculum elements every year.</p> <p>Develop training program announcements and make available on the OEHHA Web page and provide hard copy announcements to 61 local health officers and 4 medical associations each year.</p> <p>Develop and update of the Guidelines for Physicians describing the California Medical Supervision Program every 3 years. This is a reasonable level of effort because of medical advances and change in practice.</p>	0.2 Research Scientist Supervisor I 0.6 Public Health Medical Officer II 0.4 Public Health Medical Officer III 0.5 Staff Toxicologist	<p>Annually provide detailed medical training to 100 physicians on pesticide poisoning recognition, management, and reporting. (HSC §105200-05). Distribute materials via the OEHHA Web page to 500 physicians who report pesticide illnesses. Evaluate cholinesterase monitoring program annually and make recommendations for improvements (FAC §12980), specifically assessing the cost and feasibility of conducting electronic laboratory reporting and standards for blood testing. This is a reasonable level of effort because of need to improve medical management by local health officers and by migrant and rural health providers. These efforts will reduce medical costs to employers, employees, and the public.</p> <p>Review and update training medical syllabus and 2 curriculum elements each year. This is a reasonable level of effort because of continued advances in medical practice, emerging technology for distributing information, and requests to address specific chronic sequelae from pesticide exposures.</p> <p>Develop training program announcements and make available on the OEHHA Web page and provide hard copy announcements to 61 local health officers and 4 medical associations each year. This is a reasonable level of effort to reach rural health clinics, medical managers, ER physicians, poison control centers, nurses, and others. (HSC §105205).</p> <p>Develop and update of the Guidelines for Physicians describing the California Medical Supervision Program every 3 years. (HSC §105205). This is a reasonable level of effort to keep current on medical and laboratory advances and to offer technical guidance opportunity to some 65,000 practicing physicians.</p>

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**Table 10. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Pesticide Illness Reporting (PIR)**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.3 Research Scientist Supervisor I 0.5 Staff Toxicologist 0.1 Public Health Medical Officer III	<p>Continue to maintain and improve pesticide illness reporting system, including development of new reporting form.</p> <p>Annually review and analyze 1000 to 1800 Pesticide Illness Reporting forms to assess timeliness, quality and completeness. Worked with DHS to include pesticide illnesses into statewide disease reporting system. In 2004 developed system architecture for reporting by a Web-based system, integrating into the field investigation efforts, and interface with the California Poison Control System. Provided DPR consultation for federal grant application for integrating the pesticide use reporting system with the Web illness reporting system.</p> <p>Provided updates on pesticide illness reporting mechanisms to all 62 local health officers and to 58 county agricultural commissioners.</p>	<p>0.3 Research Scientist Supervisor I 0.5 Staff Toxicologist 0.1 Public Health Medical Officer III</p> <p>\$50K/yr contract funds for software development.</p>	<p>Develop 1 regulation for the pesticide illness reporting form, including means for reporting via the Web. Continue to maintain and improve pesticide illness reporting system by providing education and outreach to 62 local health officers, 58 county agriculture commissioners, and 4 medical associations, and 500 physicians (HSC §105200). This is an appropriate resource allocation to assure public health response and prevention of the 1400 pesticide illnesses reported each year. The contract is needed to develop and maintain the statewide software infrastructure for improving the timeliness, completeness, and accuracy of illness reporting. Average occupation time now is greater than 100 days, with resources OEHHA could reduce that to less than one week.</p> <p>Annually review and analyze 1000 to 1800 Pesticide Illness Reporting forms to assess timeliness, quality and completeness. Integrate electronic illness reporting systems to create efficiencies in case management and field investigations. Execute plans for Web-based illness reporting system, field investigations, physician guidance, laboratory reporting, and California Poison Control System participation. (HSC §105200).</p> <p>Train county health and agricultural department staff in all 58 counties (typically, 3 per county). Provide training to 500 priority physicians using new system (HSC §105205).</p>

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**Table 11. Pesticide and Environmental Toxicology Section: Food Safety: Pesticide and Other Chemical Residues**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.5 Staff Toxicologist	<p>Review 2 food consumption survey per year.</p> <p>Identify priority chemicals of concern.</p> <p>Review/evaluate 1 dietary intake level per year.</p> <p>Review components of guidelines for dietary risk assessment.</p> <p>Review with “reference values” databases.</p>	<p>3.0 Staff Toxicologist</p> <p>\$50K contract/yr for collecting data on food and nutrition surveys, time-consuming data summaries with student help.</p>	<p>With the required level of positions and as a necessary element of the pesticide RCD peer review, analyze 3 food consumption surveys per year (HSC §59004 and FAC §13129). For program efficiencies and consistency, apply scientific determinations to 4 fish advisories (Water Code13177.5, HSC 59009) and 2 to 5 PHGs (HSC 116365). Example surveys are: National Health and Nutrition Examination Surveys, Continuing Survey of Food Intakes by Individuals, Food and Nutrition Board. Recommended Dietary Allowances, Continuing Survey of Food Intakes by Individuals and the Diet and Health Knowledge Survey. Analysis focuses chemistry, toxicity, exposed demographics, physical status, and food category of concern.</p> <p>With required positions evaluate up to 5 dietary intake levels per year in support of relative contribution in relation to water, food, and total intake pesticide residues for PHG development (HSC 116365).</p> <p>Develop and maintain database with</p>



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**Table 11 (concluded). Pesticide and Environmental Toxicology Section: Food Safety: Pesticide and Other Chemical Residues**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
			<p>“reference values” for specific sensitive subpopulations. (AB 2342, effective July 2005).</p> <p>To support the above, develop 1-2 components of guidelines for dietary risk assessment, per year. Conduct up to 5 dietary risk assessments per year.</p> <p>From the above, identify/prioritize 5 chemicals of concern per year, and identify/prioritize 5 elements of concern in relation to total exposure per year. HSC §59004</p>

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**Table 12. Pesticide and Environmental Toxicology Section: Food Safety: Fish Contamination**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.5 Senior Toxicologist 1.6 Staff Toxicologist 1.0 Research Scientist II 1.0 Office Assistant	<p>Develop 3 reports describing consumption advisories for up to 6 water bodies per year for fish and wildlife contaminated with chemicals based on review of monitoring data from the Water Boards, federal, and state agencies. Reports utilize updates and reviews of toxicity criteria, epidemiology studies, and exposure analysis from scientific articles (see below).</p> <p>Develop recommendations for 1-2 recurring or special toxicology/environmental/ public health issues/yr (e.g., new studies on mercury in fish, dioxin in oysters) following requests and data from Water Boards, state or local agencies.</p> <p>Review/update toxicological criteria for 1-4 contaminants in fish per year, following the review of 20-200 scientific articles/yr.</p> <p>Develop 3-6 fact sheets/yr for advisories or health effects of specific chemicals found in fish.</p> <p>Respond to 4 or more public inquiries per month on chemicals in fish following release of data by Water Boards, federal, state, and local agencies.</p> <p>Provide technical support to DHS, local agencies and the federal government regarding toxicological basis of 3-6 advisories per year.</p> <p>Develop education and outreach materials and update annually incorporating new information.</p>	0.5 Senior Toxicologist 3.0 Staff Toxicologist 1.0 Research Scientist II 1.0 Office Assistant \$50K/yr contract funds for student assistance in specialty literature searches, data entry, and organizing abstracts/tables/etc.	<p>Develop 4 reports describing consumption advisories for up to 8 water bodies per year for fish and wildlife contaminated with chemicals. This modest increase is necessary to address a backlog of inland and bay water body samplings (8-10 reservoirs, 3 bays, and multiple lakes). Many, if not all are heavily fished and may require advisories to protect subsistence fishers. (Water Code13177.5, HSC 59009)</p> <p>Based on historical requests, develop recommendations for up to 2 recurring or high profile toxicology/environmental/ public health issues/year (new data on PCBs in fish, PBDEs in fish, commercial catch ban) following requests and data from Water Boards, state or local agencies. (HSC 59009 &amp; 59011; F&amp;G 7715, Water Code13177.5).</p> <p>In support of the above, review/update toxicological criteria for 2-5 contaminants (e.g., selenium, PCBs) per year, following the review of 30-300 scientific articles/chemicals/yr. (e.g., PBDEs). (HSC 59009, Water Code13177.5)</p> <p>Develop 4-8 fact sheets/yr for advisories or health effects of specific chemicals in fish. (Water Code13177.5, HSC 59011).</p> <p>Respond to 6 or more public inquiries per month on chemicals in fish following release of data by Water Boards, federal, state, and local agencies. (HSC 59009 &amp; 59011)</p> <p>Provide technical support to DHS, local agencies and the federal government regarding toxicological basis of 4-8 advisories per year. (Water Code13177.5, HSC 59011).</p> <p>Edit and clarify education and local/state outreach materials annually incorporating new information. (HSC 59009 &amp; 59011, Water Code13177.5)</p>

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**Table 13. Pesticide and Environmental Toxicology Section: Water Quality: Surface Waters**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.5 Senior Toxicologist 1.1 Staff Toxicologist 1.0 Research Scientist II	<p>Develop and prepare a health risk assessment of tertiary butyl alcohol (TBA) to recommend risk-based concentrations for TBA discharged into water bodies with different beneficial uses (i.e., concentrations that are protective of either human health or aquatic life).</p> <p>Evaluation of national BAFs and translator methodology to implement a discharge policy.</p> <p>Evaluation of California data to develop California specific BAFs.</p> <p>Review, evaluate, and organize data from 2- 5 reports per year on fish distribution, prevalence and landings, chemistry data, collection results, and fish consumption surveys for use in monitoring planning and risk assessments.</p> <p>Annually enter and evaluate data for 50-100+ samples, multiple species, and up to 90 chemicals and other variables per species-sample combination from Water Board bioaccumulation monitoring programs.</p> <p>Maintain database and plan yearly monitoring.</p>	0.5 Senior Toxicologist 1.1 Staff Toxicologist 1.0 Research Scientist II	<p>Develop and prepare a health risk assessment of one water contaminant to recommend risk-based concentrations for that contaminant discharged into water bodies with different beneficial uses (i.e., concentrations that are protective of either human health or aquatic life). (HSC 59009)</p> <p>Evaluation of tissue concentration predictions based on nation and California BAFs. Evaluation of methylmercury tissue criteria, and other chemicals for protection of human health. (HSC 59009)</p> <p>Review, evaluate, and organize data from 2-5 reports per year on fish distribution, prevalence and landings, chemistry data, collection results, and fish consumption surveys for use in monitoring planning and risk assessments. (HSC 59009, Water Code13177.5)</p> <p>Annually enter and evaluate data for 50-100+ samples, multiple species, and up to 90 chemicals and other variables per species-sample combination from Water Board bioaccumulation monitoring programs. Maintain database and plan yearly monitoring. (HSC 59009, Water Code13177.5)</p>

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**Table 14. Pesticide and Environmental Toxicology Section: Water Quality: Drinking Water**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Workload Required by Statute or to Address Backlog</b>
1.0 Senior Toxicologist 5.0 Staff Toxicologist 3.0 Associate Toxicologist 1.0 Office Technician	<p>Develop up to 15 PHGs per year for chemicals in drinking water.</p> <p>Prepare written responses to peer review and public comments on up to 15 PHGs per year.</p> <p>Respond to 1 or more public requests for information/month (phone, email, Public Record Act requests, etc.).</p> <p>Update and revise 1 PHG for the five-year review.</p> <p>Prepare 1 fact sheet per year for a PHG chemical.</p> <p>Provide early-stage technical support and consultation to DHS on criteria development, and review, evaluation and prioritization of grants applications for clean drinking water management projects.</p> <p>Development of PHGs on unregulated chemicals for 1 chemical per year.</p> <p>Assist in the development of Action Levels per year for chemicals in drinking water at the request DHS.</p>	1.0 Senior Toxicologist 7.0 Staff Toxicologist 3.0 Associate Toxicologist 1.0 Office Technician  \$150/yr contract funds for specialized technical issues.	<p>Develop up to 20 PHGs per year for chemicals in drinking water. (HSC 116365).</p> <p>Prepare written responses to peer review and public comments on up to 20 PHGs per year. (HSC 116365).</p> <p>Update and revise up to 10 PHGs every five years or as new critical data are obtained. (HSC 116365).</p> <p>Respond to 1 or more public requests for information/month (phone, email, Public Record Act requests, etc.). (HSC 116365).</p> <p>Prepare 1 fact sheet per year for a PHG chemical. (HSC 116365).</p> <p>Provide technical support and consultation to DHS on criteria development, and review, evaluation and prioritization of grants applications for 2-10 clean drinking water management projects/yr. (SB 50).</p> <p>Develop PHGs on unregulated chemicals for 1-2 chemicals/yr, and assist in the development of up to 6 Action Levels per year for chemicals in drinking water at the request DHS (H&amp;SC 59400, 116365).</p>

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**Table 15. Integrated Risk Assessment Section: Site Assessment: Screening Levels**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
	<p>Prepared document detailing the methodology on how soil numbers are developed and developed a list of 54 soil screening numbers for protecting human health (HSC §57008(a) and (b)). Awaiting comments from workshops.</p>	<p>1.0 Staff Toxicologist 1.0 Associate Toxicologist</p>	<p>While the screening numbers have been developed, the required report on the feasibility of establishing screening numbers to protect water quality and ecological resources for each of the chemicals (HSC §57008(b)(2)) could not be completed. Once public comments are received from the three workshops to be held on the screening numbers and the guidance, changes will be needed for the screening numbers (HSC §57008(d)).</p> <p>Requests by the Agency for revisions of screening numbers and for additional screening numbers (HSC §57008(d)) is anticipated because similar lists from the San Francisco Regional Water Board, with about 120 Environmental Screening Levels, and U.S. EPA, Region 9, with about 580 Preliminary Remediation Goals, are under consideration. At this time Agency estimates a minimum five updates and 15 new screening levels per year. This is about the quantity done for the original 54 considering the added work, noted above, not yet completed from the first group of chemicals.</p>

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**Table 16. Integrated Risk Assessment Section: Site Assessment: Schools**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
1.0 Senior Toxicologist 1.8 Staff Toxicologist	<p>Developed, published guidance documents for use by Cal/EPA to child-specific assess exposures and health risks at existing and proposed school sites. (HSC §901(f) and (g)).</p> <p>History of this program as of February 2005. Five chemicals have been fully assessed and are finishing external peer review. Two additional chemicals have undergone the first public review and are now awaiting external peer review. Three chemicals are now close to going out for public review for the first time. Two chemicals are in the middle of their assessment and three are at the being of the process. At the end of 2004 there were to be 15 completed assessments, the program has 5 chemicals almost complete and 5 partially complete. It has one half to two thirds the expected output.</p>	<p>1.0 Senior Toxicologist 2.8 Staff Toxicologist</p> <p>\$35K/yr contract funds for developing computer tool (spread sheet) to assist in using the guidance.</p> <p>\$40K/yr contract funds to hire outside consultants and student assistants to assist in the update of the compilation of chemicals.</p> <p>\$200K/yr contract funds to hire outside consultants and student assistants to assist in the literature search and review and criteria development</p> <p>\$112K/yr contract funds to assist in obtaining valid exposure parameters for children.</p>	<p>Supervise the Schools Project including developing work plans, overseeing technical work production.</p> <p>Identify up to 5 chemical contaminants per year that are commonly found at school sites and determined to be of greatest concern based on the child-specific criteria, and develop 5 child-specific toxicity criteria per year to be used with the risk assessment guidance based on a prioritization process (HSC §901(g)). Experience has shown that the program can produce about 3 criteria per year at the current resource level and needs additional resources to meet the required 5 per year due to the unexpected difficulty of finding and assessing child-specific toxicity data.</p> <p>Maintain and update guidance documents for use by Cal/EPA for child-specific assessment of exposures and health risks at existing and proposed school sites (HSC §901(f)). There are many data gaps and uncertainties in the guidance that need to be refined with this work to complete the guidance. This includes child-specific exposure parameters that change based on growth and development and how best to incorporate development stage toxicity into long-term exposure scenarios.</p> <p>Identify and address 1-3 data gaps and uncertainties per year in need for outside scientific expertise in the area of child activity patterns and physiological parameters. Contract for external services to address issues (HSC §901(f) and (g)). This is needed to help supply the data necessary for criteria development.</p>

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<b>Table 17. Integrated Risk Assessment Section: Consumer Products: Fuels</b>			
<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Workload Required by Statute or to Address Backlog</b>
1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Research Scientist I 1.0 Hazardous Substance Scientist 1.0 Assoc. Govt'l Prog. Analyst	<p>Developing, identifying, compiling, and evaluating data for the development of a multimedia evaluation process for fuel specification regulations to determine adverse impact on public health or environment. Maintain and update guidance as needed (HSC §43830.8).</p> <p>Develop guidance, evaluate data submissions, and evaluate proposed new fuel specification regulations' impact on public health or environment via all environmental pathways, including air, water, and soil.</p> <p>Prepare 1/yr reviews summarizing the analysis framework addressing human exposure from primary and secondary pathways from multiple releases of contaminants associated with production, use, recycling, and disposal of motor vehicle fuels.</p> <p>Investigate the potential health impacts from the use of used motor oil in bunker fuel to power ships in harbor and electrical generators. Evaluate the volume and geographical locations of motor oil/bunker fuel mixture used in the state. Model the extent of exposure. Analyze health risks relative to only the use of bunker fuel. Further evaluation of other uses of recycled oil.</p>	1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Research Scientist I 1.0 Hazardous Substance Scientist 1.0 Assoc. Govt'l Prog. Analyst  \$25K/yr contract funds to provide consultant and student assistance in the acquisition, review and summary of literature for usability in the guidance and to help identify data gaps. \$50K/yr contract funds for consultants to assist in the review of the data based on the need for specialized expertise.	<p>Develop, identify, compile, and evaluate data for the development of a multimedia evaluation process for fuel specification regulations to determine adverse impact on public health or environment. Maintain and update guidance as needed (HSC §43830.8).</p> <p>Develop guidance, evaluate data submissions, and evaluate proposed new fuel specification regulations' impact on public health or environment via all environmental pathways, including air, water, and soil (HSC §43830.8).</p> <p>Prepare 1-3 reviews/yr summarizing the analysis framework addressing human exposure from primary and secondary pathways from multiple releases of contaminants associated with production, use, recycling, and disposal of motor vehicle fuels (HSC §43830.8).</p> <p>IWMB is seeking a safe market for over 88.4 million gallons of recycled oil per year. Investigate the potential health impacts from the use of used motor oil in bunker fuel to power ships in harbor and electrical generators. Evaluate the volume and geographical locations of motor oil/bunker fuel mixture used in the state. Model the extent of exposure. Analyze health risks relative to only the use of bunker fuel. Further evaluation of other uses of recycled oil.</p>

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**Table 18. Integrated Risk Assessment Section: Site Assessment: General**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Workload Required by Statute or to Address Backlog</b>
2.0 Staff Toxicologist	<p>Review and evaluate site-specific health risk assessments from past, current, or future exposure to on-site workers, residents on or near sites of contamination, or possible future occupants of areas where contaminants may have migrated based on data supplied in site characterization and/or remedial action plans; and prepares comments and/or recommendations. (Water Code §13395.5)</p> <p>Provide toxicological and technical assistance to assist regional water quality control boards and regional integrated waste management boards in the area of human health site risk assessment criteria and methodology (Water Code §13395.5).</p>	2.0 Staff Toxicologist	<p>Review and evaluate site-specific health risk assessments from past, current, or future exposure to on-site workers, residents on or near sites of contamination, or possible future occupants of areas where contaminants may have migrated based on data supplied in site characterization and/or remedial action plans; and prepares comments and/or recommendations. (Water Code §13395.5)</p> <p>Provide toxicological and technical assistance to assist regional water quality control boards and regional integrated waste management boards in the area of human health site risk assessment criteria and methodology (Water Code §13395.5).</p>



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**Table 19. Border Coordination**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
1.0 Staff Toxicologist	<p>Develop and conduct 1-3 bilingual (English/Spanish) trainings or workshops/yr in toxicology, risk assessment, and other applications in response to environmental and human health issues relating to pollution near the California/Mexico border (HSC §71100).</p> <p>Assist Cal/EPA's Border Coordinator in general activities to promote scientific and technological environmental health capabilities and resources for the populations at the CA/Mexico border.</p>	1.0 Staff Toxicologist	<p>Develop and conduct 1-3 bilingual (English/Spanish) trainings or workshops/yr in toxicology, risk assessment, and other applications in response to environmental and human health issues relating to pollution near the California/Mexico border (HSC §71100).</p> <p>Assist Cal/EPA's Border Coordinator in general activities to promote scientific and technological environmental health capabilities and resources for the populations at the CA/Mexico border.</p>

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**Table 20. Integrated Risk Assessment Section: Consumer Products: Art Products**

<b>Current Position(s)</b>	<b>Workload</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
	Biannually revise art and crafts list of materials that cannot be used in grades K-6 and provide list to the Department of Education based on changes to the Arts and Creative Materials Institute's listings.	<p>1.0 Staff Toxicologist  1.0 Associate Toxicologist  1.0 Staff Services Analyst</p> <p>\$100K/yr contract funds for UC laboratory research on exposure routes and uptake of powers, liquids and aerosols specific to art and craft materials.</p>	<p>Annually review, research and revise art and crafts list of materials that cannot be used in grades K-6 and provide list to the Department of Education. (Education Code §32064(a) and 32066)</p> <p>Prepare a semiannual update of art and craft products that may be purchased for use in California schools (Education Code §32066). This is a reasonable level of effort because of the amount of “new and improved” products that appear during the year.</p> <p>Review submission information on 100-200 products per year and certify appropriate products. (Education Code §32064 and 32066)</p> <p>Through in-house literature review and out side research studies develop better ways to assess childhood exposure to art and craft materials used in schools. (Education Code §32064(c))</p> <p>Manage and track confidential and proprietary documents submitted for review in the Art Hazards Program by technical staff. (Education Code §32065(g))</p> <p>If allowed, account for fee submissions and reviews done on art products. Develop and maintain analytical tools to ensure program fees are used effectively and efficiently.</p> <p><b>The legislative mandate for this program does not specify a required level of effort for this program. It does require the program to identify hazardous art and craft materials, which requires product ingredient review. There are thousands of products available and new ones appear every year, and old ones are removed. OEHHA has proposed a modest program it feels will be able to meet the ongoing needs of the mandate.</b></p>

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**Table 21. Emerging Scientific/Chemical Issues: Environmental Protection Indicators for California**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
	<p>Maintain and update the environmental indicator system. Updates released by February 2005</p> <p>Provide technical support to Agency efforts to integrate environmental indicators into planning/management processes.</p>	<p>1.0 Research Scientist Supervisor I</p> <p>1.0 Research Scientist I</p> <p>1.0 Associate Governmental Program Analyst</p> <p>\$525K/yr contracts (8 IAA with other Cal/EPA BDOs, DHS, Resources Agency).</p> <p>\$225/yr contract for consulting services.</p>	<p>Continuous improvement and maintenance of EPIC indicator system and database. It is expected that about 40-50 existing indicators will be updated every two years, and 80-100 new indicators considered per year for inclusion in the indicator system to address additional issues, or to present more specific (e.g., regional) information. Improvements to the indicator system will be based on reviews of indicators and concepts from 20-24 indicator systems maintained by regional entities, other states, the federal government, international bodies and research organizations. These tasks will require coordination with Cal/EPA BDOs and other State agencies. (Public Resources Code §71081).</p> <p>Technical support to Cal/EPA in developing and implementing mechanisms for integrating environmental indicators in decision-making (Public Resources Code §71081)</p> <p>Preparation of biannual report and about 6-10 issue-, indicator- or audience-specific supplemental reports per year. (Public Resources Code §71081).</p> <p>Support to interagency workgroup and scientific review panel, both of which are expected to meet 2-4 times/yr (Public</p>

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**Table 21 (concluded). Emerging Scientific/Chemical Issues: Environmental Protection Indicators for California**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
			<p>Resources Code §71081)</p> <p><b>The legislative mandate does not specify the level of effort required for this program. OEHHA presumes that the Legislature has left the decision to the program. Therefore, based on prior experience with the program, OEHHA is proposing the minimum needed to have an ongoing environmental indicator program for Cal/EPA (with the Resources Agency) that provides the coordination, information, and assessment of California's environment.</b></p>

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**Table 22. Reproductive and Cancer Hazard Assessment Section: Cancer Hazard Identification**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
0.4 Senior Toxicologist 2.0 Staff Toxicologist 0.25 Research Scientist III 1.0 Associate Toxicologist 0.5 Research Scientist II 1.0 Office Assistant	<p>Annually prioritize 12 chemicals for review by the State's Qualified Experts (SQE). (HSC 25249.8; Title 22, Cal. Code of Regs. §12302). Develop hazard identification packages on two potential carcinogens annually for consideration by the states qualified experts for listing. Testify on packages and science underlying hazard identification on two chemicals at formal public meetings states qualified experts for listing (HSC 25249.8; Title 22, Cal. Code of Regs. §12302).</p> <p>Review technical reports of authoritative bodies and warnings and labels required by state and federal agencies, identify up to 5 cancer causing chemicals and update the list annually as required by law (HSC 25249.8; Title 22, Cal. Code of Regs. §12306; Western Crop v. Davis court opinion).</p>	0.5 Senior Toxicologist 2.0 Staff Toxicologists 1.0 Associate Toxicologist 1.0 Research Scientist II 1.0 Office Technician 1.0 Office Assistant \$125K/yr contract funds for evaluating exposure and toxicological data for prioritizing chemicals, and conducting literature searches for hazard identification documents.	<p>The prioritization process for selecting chemicals for State Qualified Expert (SQE) consideration has changed. Annually screen 400 backlogged chemicals and bring 8-15 chemicals to carcinogen committee for possible listing. Develop hazard identification package and testify on packages and science underlying hazard identification on three chemicals at formal public meetings of the SQE (HSC. 25249.8; Title 22, Cal. Code of Regs (CCR) §12302).</p> <p>Review technical reports of the authoritative bodies and warnings and labels required by state and federal agencies. In regulation there are five authoritative bodies (Title 22, CCR §12306), who annually collectively generate 10-20 candidates for Prop. 65 cancer listing per year. Of these, identify up to 8 cancer causing chemicals and update the list annually as required by law (HSC 25249.8; Title 22, CCR §12306); Western Crop v. Davis court opinion). This is to maintain the current backlog of</p>

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**Table 22 (concluded). Reproductive and Cancer Hazard Assessment Section: Cancer Hazard Identification**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
			approximately 20. Settlement in two court cases found the State was not meeting mandate for implementing authoritative bodies listing provision.

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**Table 23. Reproductive and Cancer Hazard Assessment Section: Development of Cancer Regulatory Numbers and Technical Support to the Attorney General**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.4 Senior Toxicologist 1.0 Staff Toxicologist 1.0 Biostatistician IV 0.5 Research Scientist II	<p>Conduct dose response analyses and prepare no significant risk levels (NSRLs), proposing 8 NRSL regulations annually. Address public comments, prepare final statement of reasons for OAL and adopt in final regulation eight NSRLs annually under the authority of HSC 25249.5 et seq.; Title 22, Cal. Code of Regs. §12705.</p> <p>Prioritize chemicals for NSRL development and routinely update, release and post on the web documentation of prioritizations and draft and adopt numbers (AFL CIO et al. v. Deukmejian; Title 22, Cal. Code of Regs. §12705).</p> <p>Provide technical support to Attorney General (HSC 25249.7) on two enforcement cases on exposures to Proposition 65 carcinogens annually. We are unable to address all requests for technical support from the Attorney General, requiring that office to utilize outside expertise that is often unfamiliar with OEHHA's policy and procedures.</p>	<p>0.25 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Biostatistician IV 0.5 Associate Toxicologist 0.5 Research Scientist II 1.0 Senior Environmental Research Scientist Specialist</p> <p>\$75K/yr contract funds for pharmacokinetic and biologically based modeling.</p>	<p>There is a backlog of 250 chemicals on Proposition 65 cancer list without NSRLs, with 3-10 carcinogens being added annually. As dictated by a 1992 court settlement agreement (AFL CIO v Duke), OEHHA must prioritize chemicals for NSRL development and routinely update, release and post on the web documentation of prioritizations. Conduct dose response analyses and prepare no significant risk levels (NSRLs), proposing up to 12 NRSL regulations annually. Address public comments, prepare final statement of reasons for OAL and adopt in final regulation eight NSRLs annually under the authority of HSC 25249.5 et seq.; Title 22, Cal. Code of Regs. §12705.</p> <p>Court cases affect policy and workload procedure changes. Provide technical support to Attorney General on four enforcement cases on exposures to Proposition 65 carcinogens annually, and meet all other requests by the AG for technical assistance (HSC 25249.7). This will allow us to keep current with requests from the Attorney General's office.</p>

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**Table 24. Reproductive and Cancer Hazard Assessment Section: Cancer Safe Use Determinations and other Cancer Analyses for Proposition 65 and Other OEHHA Programs**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.2 Senior Toxicologist  1.0 Assoc. Toxicologist  0.25 Research Scientist II	<p>Evaluate 1-2 Safe Use Determination request per year for carcinogens and conduct the SUD (Title 22, Cal. Code of Regs. §12204).</p> <p>Evaluate at most one submission for interpretive guidelines per year for carcinogens. (Title 22, Cal. Code of Regs. 12203).</p> <p>Evaluate at most one petition from the public on a Proposition 65 carcinogen issue. (HSC 25249.5 et seq.)</p>	0.25 Senior Toxicologist 1.5 Staff Toxicologist 0.5 Assoc. Toxicologist 0.5 Research Scientist II	<p>By regulation OEHHA must evaluate requests for Safe Use Determinations (SUDs), which are technical assistance to industry and that also furthers interpretations of Prop. 65. Requests for SUDs are increasing due to a change in the regulation, with 2-4 requests for SUDs annually for carcinogens (Title 22, Cal. Code of Regs. §12204).</p> <p>Evaluate up to two submissions for interpretive guidelines per year for carcinogens. (Title 22, Cal. Code of Regs. 12203).</p> <p>Evaluate up to two petitions for regulatory action on a Proposition 65 carcinogen issue. (HSC 25249.5 et seq.).</p>



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**Table 25. Reproductive and Cancer Hazard Assessment Section: Reproductive and Developmental Toxicity Hazard Identification**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.5 Senior Toxicologist 2.0 Staff Toxicologists 1.0 Associate Toxicologist 1.0 Office Technicians	<p>In the past 5 years due to resource constraints and competing priorities we have not been able to prioritize chemicals for the state's qualified experts (SQE) review. (HSC 25249.8; Title 22, Cal. Code of Regs. §12302).</p> <p>Identify and document the health effects annually for two candidate chemicals for listing for consideration by the states qualified experts. (HSC 25249.8; Title 22, Cal. Code of Regs. §12302).</p> <p>Review technical reports of authoritative bodies and warnings and labels required by state and federal agencies, identify 2-5 reproductive hazard chemicals and update the list annually as required by law (HSC 25249.8; Title 22, Cal. Code of Regs. §12306; Western Crop v. Davis court opinion).</p>	0.5 Senior Toxicologist 2.0 Staff Toxicologists 1.0 Associate Toxicologist 0.25 Biostatistician IV 0.5 Research Scientist III 1.0 Research Scientist II \$125K/yr contract funds for evaluating exposure and toxicological data for prioritizing chemicals, and conducting literature searches for hazard identification documents.	<p>The prioritization process for selecting chemicals for SQE consideration has changed. Annually screen 300 backlogged chemicals and bring 5-15 chemicals to DART committee for possible listing. Develop hazard identification package and testify on packages and science underlying hazard identification on three chemicals at formal public meetings of the DART State Qualified Expert (HSC 25249.8; Title 22, Cal. Code of Regs. §12302).</p> <p>Review technical reports of authoritative bodies and warnings and labels required by state and federal agencies. In regulation there are five authoritative bodies (Title 22, Cal. Code of Regs. §12306), who annually collectively generate 8-20 candidates for Proposition 65 DART listing per year. Of these, identify up to 8 cancer causing chemicals and update the list annually as required by law (HSC 25249.8; Title 22, Cal. Code of Regs. §12306; Western Crop v. Davis). This is to maintain the current</p>

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**Table 25 (concluded). Reproductive and Cancer Hazard Assessment Section: Reproductive and Developmental Toxicity Hazard Identification**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
			backlog of approximately 20. Settlement in two court cases found the State not meeting mandate for implementing authoritative bodies provision.

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**Table 26. Reproductive and Cancer Hazard Assessment Section: Development of Reproductive Toxicity Regulatory Numbers and Technical Support to the Attorney General**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
0.25 Senior Toxicologist 1.0 Staff Toxicologist 0.25 Research Scientist III	<p>Prepare up to five Maximum Allowable Dose Levels (“safe harbors” or MADLs), for listed reproductive hazards and adopt appropriate regulations by preparing and submitting to OAL initial and final statement of reasons on 5 MADLs per year. (HSC 25249.10(c)); Deukmejian v. AFL CIO et al.; Title 22, Cal. Code of Regs. §12805).</p> <p>Prioritize chemicals for MADL development and routinely update, release and post on the web documentation of prioritizations and draft and adopted numbers (AFL CIO et al. v. Deukmejian; Title 22, Cal. Code of Regs. §12805).</p> <p>Provide technical support to Attorney General on two enforcement cases on exposures to Proposition 65 reproductive toxins annually (HSC 25249.7). We are unable to address most requests for technical support from the Attorney General, requiring that office to utilize outside expertise that are often unfamiliar with OEHHA policy and procedure.</p>	<p>0.25 Senior Toxicologist 1.5 Staff Toxicologist 0.5 Biostatistician IV 0.25 Research Scientist III</p> <p>\$75K/yr contract funds for dose response analysis and literature searches to support such analyses</p>	<p>Prioritize chemicals for MADL development and routinely update, release and post on the web documentation of prioritizations and draft and adopt numbers (Title 22, Cal. Code of Regs. §12805).</p> <p>Out of a backlog of ~250 chemicals on the DART Proposition 65 list, annually prepare up to 10 MADLs (HSC 25249.10(c)).</p> <p>Court cases affect policy and workload procedure changes. Provide technical support to Attorney General (HSC 25249.7) on four enforcement cases on exposures to Proposition 65 reproductive toxins annually, and meet other requests by the AG for technical assistance</p>

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**Table 27. Reproductive and Cancer Hazard Assessment Section: Reproductive Toxicity Safe Use Determinations and other Reproductive Toxicity Analyses for Proposition 65 and Other OEHHA Programs**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
0.25 Senior Toxicologist 0.5 Staff Toxicologist 0.25 Research Scientist III	Evaluate one Safe Use Determination request per year for reproductive toxins (Title 22, Cal. Code of Regs. §12204). Evaluate up to one submission for interpretive guidelines per year for reproductive toxins. (Title 22, Cal. Code of Regs. 12203). Evaluate up to one other requests for work product on Proposition 65 reproductive toxin issues. (HSC 25249.5 et seq.)	0.25 Senior Toxicologist 1.0 Staff Toxicologist 0.25 Biostatistician IV 0.25 Research Scientist III	Evaluate up to three Safe Use Determination (SUD) request per year for reproductive toxins (Title 22, Cal. Code of Regs. §12204). SUDs are technical assistance to industry that also furthers the interpretations of Prop. 65. This level of effort is based upon increased number of requests since the regulation was changed. Evaluate one submission for interpretive guidelines per year for reproductive toxins. (Title 22, Cal. Code of Regs. 12203). Evaluate up to one other request for regulatory action on Proposition 65 reproductive toxin issues. (HSC 25249.5 et seq.)

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**Table 28. Emerging Scientific/Chemical Issues: Gasoline-Associated Air Pollution: Characterization of Cancer and Non-Cancer Health Effects**

Current Position(s)	Current Output	Required Position(s)	Output Required by Statute or to Address Backlog
1.0 Research Scientist Supv. I	<p>Prepare and submit report every 5 to 6 years characterizing the impact of cancer and non-cancer hazards from gasoline associated air pollutants based upon year-specific air monitoring data.</p> <p>This level of effort is insufficient to provide data to assist in the development of a new fuel regulation. We may not be able to complete this project due to insufficient expertise.</p>	<p>1.0 Senior Toxicologist  1.0 Research Scientist Supervisor I  2.0 Staff Toxicologists  1.0 Research Scientist II</p> <p>\$179K/yr contract funds for identifying additional atmospheric transformation products of gasoline exhaust and emissions, for estimating gasoline-attributable concentrations of atmospheric transformation products, and for evaluating exposure and toxicological data on air pollutants associated with gasoline use especially those with the potential for a differential impact on children.</p>	<p>Every two years, prepare and submit reports characterizing the impact of cancer and non-cancer hazards from gasoline associated air pollutants based upon year-specific air monitoring data. (HSC 43830.8 (b)).</p> <p>The ARB will likely be requesting OEHHA to evaluate 6 fuel additives or minor reformulations per year, and one major reformulation per year, which will require a more intensive analysis. Reasonable level of effort would be to conduct one study every 2-3 years in order to complete 1 to 2 studies on an existing vehicle fuel prior to adoption of a new fuel regulation, and to document the success of the Governor's Action Plan proposal.</p>

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**  
**Office of Environmental Health Hazard Assessment**  
**WORKLOAD OUTPUT**

**Table 29. Reproductive and Cancer Hazard Assessment Section: Children's Cancer Guidelines and Assessment**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
1.0 Staff Toxicologist	Unable to develop cancer assessment guidelines by mandated deadline of July 2004, that assesses risk from childhood exposure and revise cancer risk assessment guidelines to be more protective of the fetus, infant, and child.	2.0 Staff Toxicologists 1.0 Biostatistician IV 1.0 Research Scientist III 1.0 Public Health Medical Officer II \$400K/yr contract funds conducting workshops, expanding the data base, developing regulatory levels protection of infants and children	Develop, by July 2004, cancer assessment guidelines assessing risk from childhood exposure and revise cancer risk assessment guidelines to be more protective of the fetus, infant, and child; periodically update the guidance as science advances (HSC 901)  Screen and prioritize the approximately 250 cancer potencies currently in regulation to determine those that do not adequately account for greater fetal, infant and childhood sensitivity (HSC 901). Annually, revise the potency on the 15 highest priority chemicals.  .

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**  
**Office of Environmental Health Hazard Assessment**  
**WORKLOAD OUTPUT**

**Table 30. External Affairs: Proposition 65 Implementation**

<b>Current Position(s)</b>	<b>Current Output</b>	<b>Required Position(s)</b>	<b>Output Required by Statute or to Address Backlog</b>
<p>1.0 Senior Hazardous Substances Scientist</p> <p>1.0 Associate Governmental Program Analyst</p>	<p>Schedule and provide administrative support for SAB meetings, and for public hearings, workshops, and forums.</p> <p>Draft and submit legal notices announcing public comment periods, chemical listings and other developments of interest to the public.</p> <p>Receive, compile, maintain and distribute copies of public comments received on specific Proposition 65 matters.</p> <p>Promulgate regulations that further the purpose of Prop 65. Staff the Proposition 65 telephone number and respond to public and stakeholder inquiries.</p> <p>Provide program support and coordination between RCHAS, OEHHA counsel and the Executive Office.</p> <p>Maintain and update records on chemicals listed, considered for listing, or prioritized for consideration of listing.</p>	<p>1.0 Senior Hazardous Substances Scientist</p> <p>1.0 Associate Governmental Program Analyst</p>	<p>Reserve and set up meeting rooms and arrange for court reporting services for approximately 10 public meetings/yr.</p> <p>Draft 25-50 legal notices per year for publication in the California Regulatory Notice Registry and posting on OEHHA's Web site.</p> <p>Receive, file and disseminate comment letters and attachments covering several dozen chemicals and totaling several thousand pages over a one-year period.</p> <p>Draft regulatory language, Statements of Reasons and related regulatory documents for 1-3 regulatory packages/yr.</p> <p>Handle approximately 3,800 phone calls/yr from the general public and stakeholders.</p> <p>Set up and attend approximately 24 meetings/yr to report developments to, and receive input and direction from, RCHAS, OEHHA counsel and the Executive Office.</p> <p>Continuously maintain files and develop electronic database for 750 listed chemicals and several hundred additional chemicals that are potential candidates for listing.</p>